Potential Flow Forces and Moments from Selected Ship Flow Codes in a Set of Numerical Experiments

Appendix G — Time History Plots for 0-DOF Motion of Model 5613 in Waves

Report Documentation Page

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
01 MAY 2008	**N/A**	**-**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
Potential Flow Forces and Moments from Selected Ship Flow Codes in a Set of Numerical Experiments Appendix G Time History Plots for 0-DOF Motion of Model 5613 in Waves	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)	8. PERFORMING ORGANIZATION REPORT NUMBER
Naval Surface Warfare Center Carderock Division 9500 Macarthur Boulevard West Bethesda, MD 20817-5700	

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release, distribution unlimited

13. SUPPLEMENTARY NOTES
See also ADM002134. Potential Flow Forces and Moments from Selected Ship Flow Codes in a Set of Numerical Experiments, The original document contains color images.

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**	**UU**	**2241**	

Contents

Figures

Tables

Introduction

This appendix contains all the plots and tables for the simulations involving prescribed 0-DOF motion in waves of Model 5613 scaled to the the length 154 m. Each of Figures G–1 through G–1000 contains time-history plots of the results from all codes for a single variable during one period of motion. If the code runner did not supply the data, the data vanish identically, or the data are insufficient for a single period, there is no curve for that code. The lack of data in any figure has been noted immediately below the figure. As necessary, the time that appears on the horizontal axis has been shifted so that the wave height at CG is of the form $\eta = \eta_a \sin \omega t$ for some amplitude η_a and some frequency ω. Furthermore, the time t has been replaced by $t \mod T_e$ where T_e is the period of the motion.

Tables G–1 through G–2000 contain information related to the results depicted in the figures. Two tables follow each figure. The first table gives estimates of the mean value and the amplitudes and phases of the first and second harmonics obtained by Fourier analysis. The second table gives the minimum and maximum of the variable plotted in the figure. The minimum and maximum of both the filtered and unfiltered variable are provided.

Appendix Q contains plots and tables for the behavior of the minimum and the maximum of each variable plotted in this appendix versus the wave steepness λ/H.

The headings are the same for both ships and speeds, as are the nondimensional wavelengths and wave steepnesses. The description of the waves is given in tables in the main part of the report. For ease of reference, the tables are reproduced here:

β (°)	Seas
0	Following
45	Stern quartering
90	Beam
135	Bow quartering
180	Head

Wavelength λ/L	Wave Steepness H/λ
1	1/60
1	1/20
1	1/15
1	1/10

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 0; Fn=0.0
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–1. Time history of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-8.09E-04	1.28	-4	1.23E-03	-25
A2	-8.09E-04	1.28	-4	1.23E-03	-25
FD	3.79E-04	1.28	-8	5.64E-04	21
L1	6.20E-04	1.28	-4	1.27E-03	27
L3	6.20E-04	1.28	-4	1.27E-03	27
L4	6.20E-04	1.28	-4	1.27E-03	27
NF	—	—	—	—	—
NS	-2.79E-04	1.28	0	4.17E-04	-18

Table G–2. Minimum and maximum of of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (m)	Maximum (m)	Filtered Minimum (m)	Maximum (m)
A1	-1.28	1.28	-1.27	1.27
A2	-1.28	1.28	-1.27	1.27
FD	-1.28	1.28	-1.28	1.27
L1	-1.28	1.28	-1.28	1.28
L3	-1.28	1.28	-1.28	1.28
L4	-1.28	1.28	-1.28	1.28
NF	—	—	—	—
NS	-1.28	1.28	-1.27	1.29

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.0
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–2. Time history of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–3. Coefficients of the Fourier fit $a_0 + a_1 \sin (\omega t + \Phi_1) + a_2 \sin (2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-2.43E-03	3.85	-4	3.69E-03	-25
A2	-2.43E-03	3.85	-4	3.69E-03	-25
FD	1.14E-03	3.85	-8	1.69E-03	21
L1	1.86E-03	3.85	-4	3.80E-03	27
L3	1.86E-03	3.85	-4	3.80E-03	27
L4	1.86E-03	3.85	-4	3.80E-03	27
NF	—	—	—	—	—
NS	-8.36E-04	3.85	0	1.25E-03	-18

Table G–4. Minimum and maximum of of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-3.85	3.85	-3.81	3.81
A2	-3.85	3.85	-3.81	3.81
FD	-3.85	3.85	-3.84	3.81
L1	-3.85	3.85	-3.84	3.84
L3	-3.85	3.85	-3.84	3.84
L4	-3.85	3.85	-3.84	3.84
NF	—	—	—	—
NS	-3.85	3.85	-3.81	3.87

Data identically zero, insufficient, or not available from NFA.

Figure G–3. Time history of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–5. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-3.25E-03	5.14	-4	4.92E-03	-25
A2	-3.25E-03	5.14	-4	4.92E-03	-25
FD	1.52E-03	5.13	-8	2.26E-03	21
L1	2.48E-03	5.13	-4	5.07E-03	27
L3	2.48E-03	5.13	-4	5.07E-03	27
L4	2.48E-03	5.13	-4	5.07E-03	27
NF	—	—	—	—	—
NS	-1.13E-03	5.13	0	1.69E-03	-19

Table G–6. Minimum and maximum of of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-5.14	5.14	-5.09	5.09
A2	-5.14	5.14	-5.09	5.09
FD	-5.13	5.13	-5.12	5.08
L1	-5.13	5.13	-5.11	5.11
L3	-5.13	5.13	-5.11	5.11
L4	-5.13	5.13	-5.11	5.11
NF	—	—	—	—
NS	-5.13	5.13	-5.10	5.15

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–4. Time history of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–7. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-4.87E-03	7.71	-4	7.39E-03	-25
A2	-4.87E-03	7.71	-4	7.39E-03	-25
FD	2.27E-03	7.70	-8	3.38E-03	21
L1	3.72E-03	7.70	-4	7.61E-03	27
L3	3.72E-03	7.70	-4	7.61E-03	27
L4	3.72E-03	7.70	-4	7.61E-03	27
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–8. Minimum and maximum of of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (m)	Unfiltered Maximum (m)	Filtered Minimum (m)	Filtered Maximum (m)
A1	-7.71	7.71	-7.63	7.63
A2	-7.71	7.71	-7.63	7.63
FD	-7.70	7.70	-7.68	7.62
L1	-7.70	7.70	-7.67	7.67
L3	-7.70	7.70	-7.67	7.67
L4	-7.70	7.70	-7.67	7.67
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–5. Time history of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–9. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-8.09E-04	1.28	-4	1.23E-03	-25
A2	-8.09E-04	1.28	-4	1.23E-03	-25
FD	3.79E-04	1.28	-8	5.64E-04	21
L1	7.07E-04	1.28	-4	1.09E-03	31
L3	7.07E-04	1.28	-4	1.09E-03	31
L4	7.07E-04	1.28	-4	1.09E-03	31
NF	—	—	—	—	—
NS	-2.90E-04	1.28	0	4.29E-04	-20

Table G–10. Minimum and maximum of of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (m)	Unfiltered Maximum (m)	Filtered Minimum (m)	Filtered Maximum (m)
A1	-1.28	1.28	-1.27	1.27
A2	-1.28	1.28	-1.27	1.27
FD	-1.28	1.28	-1.28	1.27
L1	-1.28	1.28	-1.28	1.28
L3	-1.28	1.28	-1.28	1.28
L4	-1.28	1.28	-1.28	1.28
NF	—	—	—	—
NS	-1.28	1.28	-1.27	1.29

Data identically zero, insufficient, or not available from NFA.

Figure G–6. Time history of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–11. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-2.43E-03	3.85	-4	3.69E-03	-25
A2	-2.43E-03	3.85	-4	3.69E-03	-25
FD	1.14E-03	3.85	-8	1.69E-03	21
L1	2.12E-03	3.85	-4	3.26E-03	31
L3	2.12E-03	3.85	-4	3.26E-03	31
L4	2.12E-03	3.85	-4	3.26E-03	31
NF	—	—	—	—	—
NS	-8.71E-04	3.85	0	1.29E-03	-20

Table G–12. Minimum and maximum of of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-3.85	3.85	-3.81	3.81
A2	-3.85	3.85	-3.81	3.81
FD	-3.85	3.85	-3.84	3.81
L1	-3.85	3.85	-3.84	3.84
L3	-3.85	3.85	-3.84	3.84
L4	-3.85	3.85	-3.84	3.84
NF	—	—	—	—
NS	-3.85	3.85	-3.81	3.86

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 45; Fn=0.0
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–7. Time history of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–13. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$,
and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613
scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-3.25E-03	5.14	-4	4.92E-03	-25
A2	-3.25E-03	5.14	-4	4.92E-03	-25
FD	1.52E-03	5.13	-8	2.26E-03	21
L1	2.83E-03	5.13	-4	4.35E-03	31
L3	2.83E-03	5.13	-4	4.35E-03	31
L4	2.83E-03	5.13	-4	4.35E-03	31
NF	—	—	—	—	—
NS	-1.10E-03	5.13	0	1.65E-03	-16

Table G–14. Minimum and maximum of of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-5.14	5.14	-5.09	5.09
A2	-5.14	5.14	-5.09	5.09
FD	-5.13	5.13	-5.12	5.08
L1	-5.13	5.13	-5.11	5.11
L3	-5.13	5.13	-5.11	5.11
L4	-5.13	5.13	-5.11	5.11
NF	—	—	—	—
NS	-5.13	5.13	-5.10	5.15

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 45; Fn=0.0
eta (m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–8. Time history of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–15. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-4.87E-03	7.71	-4	7.39E-03	-25
A2	-4.87E-03	7.71	-4	7.39E-03	-25
FD	2.27E-03	7.70	-8	3.38E-03	21
L1	4.24E-03	7.70	-4	6.52E-03	31
L3	4.24E-03	7.70	-4	6.52E-03	31
L4	4.24E-03	7.70	-4	6.52E-03	31
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–16. Minimum and maximum of of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-7.71	7.71	-7.63	7.63
A2	-7.71	7.71	-7.63	7.63
FD	-7.70	7.70	-7.68	7.62
L1	-7.70	7.70	-7.67	7.67
L3	-7.70	7.70	-7.67	7.67
L4	-7.70	7.70	-7.67	7.67
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.0
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–9. Time history of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–17. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$,
and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613
scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-8.09E-04	1.28	-4	1.23E-03	-25
A2	-8.09E-04	1.28	-4	1.23E-03	-25
FD	3.79E-04	1.28	-8	5.64E-04	21
L1	-5.30E-04	1.28	-4	8.44E-04	-37
L3	-5.30E-04	1.28	-4	8.44E-04	-37
L4	-5.30E-04	1.28	-4	8.44E-04	-37
NF	—	—	—	—	—
NS	-2.88E-04	1.28	0	4.25E-04	-18

Table G–18. Minimum and maximum of of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-1.28	1.28	-1.27	1.27
A2	-1.28	1.28	-1.27	1.27
FD	-1.28	1.28	-1.28	1.27
L1	-1.28	1.28	-1.28	1.28
L3	-1.28	1.28	-1.28	1.28
L4	-1.28	1.28	-1.28	1.28
NF	—	—	—	—
NS	-1.28	1.28	-1.27	1.28

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.0
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–10. Time history of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–19. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-2.43E-03	3.85	-4	3.69E-03	-25
A2	-2.43E-03	3.85	-4	3.69E-03	-25
FD	1.14E-03	3.85	-8	1.69E-03	21
L1	-1.59E-03	3.85	-4	2.53E-03	-37
L3	-1.59E-03	3.85	-4	2.53E-03	-37
L4	-1.59E-03	3.85	-4	2.53E-03	-37
NF	—	—	—	—	—
NS	-8.65E-04	3.85	0	1.28E-03	-18

Table G–20. Minimum and maximum of of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-3.85	3.85	-3.81	3.81
A2	-3.85	3.85	-3.81	3.81
FD	-3.85	3.85	-3.84	3.81
L1	-3.85	3.85	-3.84	3.84
L3	-3.85	3.85	-3.84	3.84
L4	-3.85	3.85	-3.84	3.84
NF	—	—	—	—
NS	-3.85	3.85	-3.81	3.84

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.0
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–11. Time history of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–21. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-3.25E-03	5.14	-4	4.92E-03	-25
A2	-3.25E-03	5.14	-4	4.92E-03	-25
FD	1.52E-03	5.13	-8	2.26E-03	21
L1	-2.12E-03	5.13	-4	3.38E-03	-37
L3	-2.12E-03	5.13	-4	3.38E-03	-37
L4	-2.12E-03	5.13	-4	3.38E-03	-37
NF	—	—	—	—	—
NS	-1.13E-03	5.13	0	1.68E-03	-17

Table G–22. Minimum and maximum of of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (m)	Maximum (m)	Filtered Minimum (m)	Maximum (m)
A1	-5.14	5.14	-5.09	5.09
A2	-5.14	5.14	-5.09	5.09
FD	-5.13	5.13	-5.12	5.08
L1	-5.13	5.13	-5.11	5.12
L3	-5.13	5.13	-5.11	5.12
L4	-5.13	5.13	-5.11	5.12
NF	—	—	—	—
NS	-5.13	5.13	-5.10	5.13

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.0
eta (m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–12. Time history of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–23. Coefficients of the Fourier fit $a_0 + a_1 \sin (\omega t + \Phi_1) + a_2 \sin (2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-4.87E-03	7.71	-4	7.39E-03	-25
A2	-4.87E-03	7.71	-4	7.39E-03	-25
FD	2.27E-03	7.70	-8	3.38E-03	21
L1	-3.18E-03	7.70	-4	5.06E-03	-37
L3	-3.18E-03	7.70	-4	5.06E-03	-37
L4	-3.18E-03	7.70	-4	5.06E-03	-37
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–24. Minimum and maximum of of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (m)	Unfiltered Maximum (m)	Filtered Minimum (m)	Filtered Maximum (m)
A1	-7.71	7.71	-7.63	7.63
A2	-7.71	7.71	-7.63	7.63
FD	-7.70	7.70	-7.68	7.62
L1	-7.70	7.70	-7.67	7.67
L3	-7.70	7.70	-7.67	7.67
L4	-7.70	7.70	-7.67	7.67
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.0
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–13. Time history of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–25. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-8.09E-04	1.28	-4	1.23E-03	-25
A2	-8.09E-04	1.28	-4	1.23E-03	-25
FD	3.79E-04	1.28	-8	5.64E-04	21
L1	1.70E-04	1.28	-4	1.76E-03	2
L3	1.70E-04	1.28	-4	1.76E-03	2
L4	1.70E-04	1.28	-4	1.76E-03	2
NF	—	—	—	—	—
NS	-2.84E-04	1.28	0	4.21E-04	-18

Table G–26. Minimum and maximum of of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-1.28	1.28	-1.27	1.27
A2	-1.28	1.28	-1.27	1.27
FD	-1.28	1.28	-1.28	1.27
L1	-1.28	1.28	-1.28	1.28
L3	-1.28	1.28	-1.28	1.28
L4	-1.28	1.28	-1.28	1.28
NF	—	—	—	—
NS	-1.28	1.28	-1.27	1.27

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 135; Fn=0.0
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–14. Time history of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–27. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-2.43E-03	3.85	-4	3.69E-03	-25
A2	-2.43E-03	3.85	-4	3.69E-03	-25
FD	1.14E-03	3.85	-8	1.69E-03	21
L1	5.10E-04	3.85	-4	5.27E-03	2
L3	5.10E-04	3.85	-4	5.27E-03	2
L4	5.10E-04	3.85	-4	5.27E-03	2
NF	—	—	—	—	—
NS	-8.53E-04	3.85	0	1.26E-03	-18

Table G–28. Minimum and maximum of of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (m)	Maximum (m)	Filtered Minimum (m)	Maximum (m)
A1	-3.85	3.85	-3.81	3.81
A2	-3.85	3.85	-3.81	3.81
FD	-3.85	3.85	-3.84	3.81
L1	-3.85	3.85	-3.84	3.84
L3	-3.85	3.85	-3.84	3.84
L4	-3.85	3.85	-3.84	3.84
NF	—	—	—	—
NS	-3.85	3.85	-3.81	3.81

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.0
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–15. Time history of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–29. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} + \cdots$ of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-3.25E-03	5.14	-4	4.92E-03	-25
A2	-3.25E-03	5.14	-4	4.92E-03	-25
FD	1.52E-03	5.13	-8	2.26E-03	21
L1	6.80E-04	5.14	-4	7.02E-03	2
L3	6.80E-04	5.14	-4	7.02E-03	2
L4	6.80E-04	5.14	-4	7.02E-03	2
NF	—	—	—	—	—
NS	-1.16E-03	5.13	0	1.71E-03	-19

Table G–30. Minimum and maximum of of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (m)	Maximum (m)	Filtered Minimum (m)	Maximum (m)
A1	-5.14	5.14	-5.09	5.09
A2	-5.14	5.14	-5.09	5.09
FD	-5.13	5.13	-5.12	5.08
L1	-5.13	5.13	-5.11	5.11
L3	-5.13	5.13	-5.11	5.11
L4	-5.13	5.13	-5.11	5.11
NF	—	—	—	—
NS	-5.13	5.13	-5.10	5.10

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 135; Fn=0.0
eta (m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–16. Time history of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–31. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-4.87E-03	7.71	-4	7.39E-03	-25
A2	-4.87E-03	7.71	-4	7.39E-03	-25
FD	2.27E-03	7.70	-8	3.38E-03	21
L1	1.02E-03	7.70	-4	1.05E-02	2
L3	1.02E-03	7.70	-4	1.05E-02	2
L4	1.02E-03	7.70	-4	1.05E-02	2
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–32. Minimum and maximum of of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (m)	Unfiltered Maximum (m)	Filtered Minimum (m)	Filtered Maximum (m)
A1	-7.71	7.71	-7.63	7.63
A2	-7.71	7.71	-7.63	7.63
FD	-7.70	7.70	-7.68	7.62
L1	-7.70	7.70	-7.67	7.67
L3	-7.70	7.70	-7.67	7.67
L4	-7.70	7.70	-7.67	7.67
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 180; Fn=0.0
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–17. Time history of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–33. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-8.09E-04	1.28	-4	1.23E-03	-25
A2	-8.09E-04	1.28	-4	1.23E-03	-25
FD	3.79E-04	1.28	-8	5.64E-04	21
L1	6.79E-04	1.28	-4	1.14E-03	27
L3	6.79E-04	1.28	-4	1.14E-03	27
L4	6.79E-04	1.28	-4	1.14E-03	27
NF	—	—	—	—	—
NS	-2.74E-04	1.28	0	4.10E-04	-15

Table G–34. Minimum and maximum of of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (m)	Maximum (m)	Filtered Minimum (m)	Maximum (m)
A1	-1.28	1.28	-1.27	1.27
A2	-1.28	1.28	-1.27	1.27
FD	-1.28	1.28	-1.28	1.27
L1	-1.28	1.28	-1.28	1.28
L3	-1.28	1.28	-1.28	1.28
L4	-1.28	1.28	-1.28	1.28
NF	—	—	—	—
NS	-1.28	1.28	-1.27	1.27

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 180; Fn=0.0
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–18. Time history of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–35. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-2.43E-03	3.85	-4	3.69E-03	-25
A2	-2.43E-03	3.85	-4	3.69E-03	-25
FD	1.14E-03	3.85	-8	1.69E-03	21
L1	2.04E-03	3.85	-4	3.41E-03	27
L3	2.04E-03	3.85	-4	3.41E-03	27
L4	2.04E-03	3.85	-4	3.41E-03	27
NF	—	—	—	—	—
NS	-8.23E-04	3.85	0	1.23E-03	-15

Table G–36. Minimum and maximum of of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-3.85	3.85	-3.81	3.81
A2	-3.85	3.85	-3.81	3.81
FD	-3.85	3.85	-3.84	3.81
L1	-3.85	3.85	-3.84	3.84
L3	-3.85	3.85	-3.84	3.84
L4	-3.85	3.85	-3.84	3.84
NF	—	—	—	—
NS	-3.85	3.85	-3.81	3.81

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 180; Fn=0.0
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–19. Time history of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–37. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-3.25E-03	5.14	-4	4.92E-03	-25
A2	-3.25E-03	5.14	-4	4.92E-03	-25
FD	1.52E-03	5.13	-8	2.26E-03	21
L1	2.71E-03	5.13	-4	4.54E-03	27
L3	2.71E-03	5.13	-4	4.54E-03	27
L4	2.71E-03	5.13	-4	4.54E-03	27
NF	—	—	—	—	—
NS	-1.12E-03	5.13	0	1.66E-03	-17

Table G–38. Minimum and maximum of of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (m)	Unfiltered Maximum (m)	Filtered Minimum (m)	Filtered Maximum (m)
A1	-5.14	5.14	-5.09	5.09
A2	-5.14	5.14	-5.09	5.09
FD	-5.13	5.13	-5.12	5.08
L1	-5.13	5.13	-5.12	5.11
L3	-5.13	5.13	-5.12	5.11
L4	-5.13	5.13	-5.12	5.11
NF	—	—	—	—
NS	-5.13	5.13	-5.10	5.10

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 180; Fn=0.0
eta (m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–20. Time history of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–39. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-4.87E-03	7.71	-4	7.39E-03	-25
A2	-4.87E-03	7.71	-4	7.39E-03	-25
FD	2.27E-03	7.70	-8	3.38E-03	21
L1	4.07E-03	7.70	-4	6.81E-03	27
L3	4.07E-03	7.70	-4	6.81E-03	27
L4	4.07E-03	7.70	-4	6.81E-03	27
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–40. Minimum and maximum of of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (m)	Maximum (m)	Filtered Minimum (m)	Maximum (m)
A1	-7.71	7.71	-7.63	7.63
A2	-7.71	7.71	-7.63	7.63
FD	-7.70	7.70	-7.68	7.62
L1	-7.70	7.70	-7.67	7.67
L3	-7.70	7.70	-7.67	7.67
L4	-7.70	7.70	-7.67	7.67
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 0; Fn=0.3
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–21. Time history of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–41. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-3.08E-05	1.28	0	4.56E-05	-16
A2	-3.08E-05	1.28	0	4.56E-05	-16
FD	5.71E-05	1.28	-2	1.91E-04	89
L1	8.91E-04	1.28	-2	1.12E-03	34
L3	8.91E-04	1.28	-2	1.12E-03	34
L4	8.91E-04	1.28	-2	1.12E-03	34
NF	—	—	—	—	—
NS	-7.67E-04	1.28	-1	1.14E-03	-20

Table G–42. Minimum and maximum of of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (m)	Maximum (m)	Filtered Minimum (m)	Maximum (m)
A1	-1.28	1.28	-1.28	1.28
A2	-1.28	1.28	-1.28	1.28
FD	-1.28	1.28	-1.28	1.28
L1	-1.28	1.28	-1.28	1.28
L3	-1.28	1.28	-1.28	1.28
L4	-1.28	1.28	-1.28	1.28
NF	—	—	—	—
NS	-1.28	1.28	-1.27	1.29

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta =   0; Fn=0.3
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–22. Time history of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–43. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-9.24E-05	3.85	0	1.37E-04	-16
A2	-9.24E-05	3.85	0	1.37E-04	-16
FD	1.72E-04	3.85	-2	5.72E-04	89
L1	2.67E-03	3.85	-2	3.37E-03	34
L3	2.67E-03	3.85	-2	3.37E-03	34
L4	2.67E-03	3.85	-2	3.37E-03	34
NF	—	—	—	—	—
NS	-2.30E-03	3.85	-1	3.42E-03	-20

Table G–44. Minimum and maximum of of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-3.85	3.85	-3.85	3.85
A2	-3.85	3.85	-3.85	3.85
FD	-3.85	3.85	-3.85	3.85
L1	-3.85	3.85	-3.85	3.85
L3	-3.85	3.85	-3.85	3.85
L4	-3.85	3.85	-3.85	3.85
NF	—	—	—	—
NS	-3.85	3.85	-3.81	3.87

Data identically zero, insufficient, or not available from NFA.

Figure G–23. Time history of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–45. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-1.24E-04	5.14	0	1.83E-04	-17
A2	-1.24E-04	5.14	0	1.83E-04	-17
FD	2.29E-04	5.13	-2	7.63E-04	89
L1	3.56E-03	5.13	-2	4.49E-03	34
L3	3.56E-03	5.13	-2	4.49E-03	34
L4	3.56E-03	5.13	-2	4.49E-03	34
NF	—	—	—	—	—
NS	-3.06E-03	5.13	-1	4.55E-03	-20

Table G–46. Minimum and maximum of of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-5.14	5.14	-5.14	5.14
A2	-5.14	5.14	-5.14	5.14
FD	-5.13	5.13	-5.13	5.13
L1	-5.13	5.13	-5.14	5.13
L3	-5.13	5.13	-5.14	5.13
L4	-5.13	5.13	-5.14	5.13
NF	—	—	—	—
NS	-5.13	5.13	-5.10	5.15

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 0; Fn=0.3
eta (m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–24. Time history of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–47. Coefficients of the Fourier fit $a_0 + a_1 \sin (\omega t + \Phi_1) + a_2 \sin (2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-1.87E-04	7.71	0	2.75E-04	-17
A2	-1.87E-04	7.71	0	2.75E-04	-17
FD	3.44E-04	7.70	-2	1.15E-03	89
L1	5.34E-03	7.70	-2	6.74E-03	34
L3	5.34E-03	7.70	-2	6.74E-03	34
L4	5.34E-03	7.70	-2	6.74E-03	34
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–48. Minimum and maximum of of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (m)	Unfiltered Maximum (m)	Filtered Minimum (m)	Filtered Maximum (m)
A1	-7.71	7.71	-7.71	7.71
A2	-7.71	7.71	-7.71	7.71
FD	-7.70	7.70	-7.70	7.70
L1	-7.70	7.70	-7.71	7.70
L3	-7.70	7.70	-7.71	7.70
L4	-7.70	7.70	-7.71	7.70
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 45; Fn=0.3
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–25. Time history of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–49. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	3.06E-04	1.28	2	4.53E-04	166
A2	3.06E-04	1.28	2	4.53E-04	166
FD	3.44E-04	1.28	5	5.60E-04	149
L1	1.82E-04	1.28	1	2.32E-04	159
L3	1.82E-04	1.28	1	2.32E-04	159
L4	1.82E-04	1.28	1	2.32E-04	159
NF	—	—	—	—	—
NS	3.68E-04	1.28	0	5.52E-04	165

Table G–50. Minimum and maximum of of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-1.28	1.28	-1.28	1.28
A2	-1.28	1.28	-1.28	1.28
FD	-1.28	1.28	-1.28	1.28
L1	-1.28	1.28	-1.28	1.28
L3	-1.28	1.28	-1.28	1.28
L4	-1.28	1.28	-1.28	1.28
NF	—	—	—	—
NS	-1.28	1.28	-1.27	1.29

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 45; Fn=0.3
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–26. Time history of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–51. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$,
and period = 21.23 sec in the case 0-DOF motion in waves of Model
5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	9.20E-04	3.85	2	1.36E-03	166
A2	9.20E-04	3.85	2	1.36E-03	166
FD	1.03E-03	3.85	5	1.68E-03	149
L1	5.46E-04	3.85	1	6.96E-04	159
L3	5.46E-04	3.85	1	6.96E-04	159
L4	5.46E-04	3.85	1	6.96E-04	159
NF	—	—	—	—	—
NS	1.10E-03	3.85	0	1.66E-03	165

Table G–52. Minimum and maximum of of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-3.85	3.85	-3.84	3.85
A2	-3.85	3.85	-3.84	3.85
FD	-3.85	3.85	-3.84	3.84
L1	-3.85	3.85	-3.85	3.85
L3	-3.85	3.85	-3.85	3.85
L4	-3.85	3.85	-3.85	3.85
NF	—	—	—	—
NS	-3.85	3.85	-3.81	3.86

Data identically zero, insufficient, or not available from NFA.

Figure G–27. Time history of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–53. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	1.23E-03	5.14	2	1.82E-03	166
A2	1.23E-03	5.14	2	1.82E-03	166
FD	1.37E-03	5.13	5	2.24E-03	149
L1	7.29E-04	5.13	1	9.28E-04	159
L3	7.29E-04	5.13	1	9.28E-04	159
L4	7.29E-04	5.13	1	9.28E-04	159
NF	—	—	—	—	—
NS	1.47E-03	5.13	0	2.20E-03	165

Table G–54. Minimum and maximum of of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-5.14	5.14	-5.13	5.14
A2	-5.14	5.14	-5.13	5.14
FD	-5.13	5.13	-5.12	5.12
L1	-5.13	5.13	-5.13	5.13
L3	-5.13	5.13	-5.13	5.13
L4	-5.13	5.13	-5.13	5.13
NF	—	—	—	—
NS	-5.13	5.13	-5.10	5.14

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 45; Fn=0.3
eta (m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–28. Time history of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–55. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$,
and period = 21.23 sec in the case 0-DOF motion in waves of Model
5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	1.84E-03	7.71	2	2.73E-03	166
A2	1.84E-03	7.71	2	2.73E-03	166
FD	2.06E-03	7.70	5	3.36E-03	149
L1	1.09E-03	7.70	1	1.39E-03	159
L3	1.09E-03	7.70	1	1.39E-03	159
L4	1.09E-03	7.70	1	1.39E-03	159
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–56. Minimum and maximum of of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (m)	Maximum (m)	Filtered Minimum (m)	Maximum (m)
A1	-7.71	7.71	-7.69	7.71
A2	-7.71	7.71	-7.69	7.71
FD	-7.70	7.70	-7.68	7.68
L1	-7.70	7.70	-7.69	7.70
L3	-7.70	7.70	-7.69	7.70
L4	-7.70	7.70	-7.69	7.70
NF	—	—	—	—
NS	—	—	—	—

G–297

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.3
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–29. Time history of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–57. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-8.09E-04	1.28	-4	1.23E-03	-25
A2	-8.09E-04	1.28	-4	1.23E-03	-25
FD	3.79E-04	1.28	-8	5.64E-04	21
L1	-5.30E-04	1.28	-4	8.44E-04	-37
L3	-5.30E-04	1.28	-4	8.44E-04	-37
L4	-5.30E-04	1.28	-4	8.44E-04	-37
NF	—	—	—	—	—
NS	-2.89E-04	1.28	0	4.25E-04	-18

Table G–58. Minimum and maximum of of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-1.28	1.28	-1.27	1.27
A2	-1.28	1.28	-1.27	1.27
FD	-1.28	1.28	-1.28	1.27
L1	-1.28	1.28	-1.28	1.28
L3	-1.28	1.28	-1.28	1.28
L4	-1.28	1.28	-1.28	1.28
NF	—	—	—	—
NS	-1.28	1.28	-1.27	1.28

Data identically zero, insufficient, or not available from NFA.

Figure G–30. Time history of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–59. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-2.43E-03	3.85	-4	3.69E-03	-25
A2	-2.43E-03	3.85	-4	3.69E-03	-25
FD	1.14E-03	3.85	-8	1.69E-03	21
L1	-1.59E-03	3.85	-4	2.53E-03	-37
L3	-1.59E-03	3.85	-4	2.53E-03	-37
L4	-1.59E-03	3.85	-4	2.53E-03	-37
NF	—	—	—	—	—
NS	-8.66E-04	3.85	0	1.28E-03	-18

Table G–60. Minimum and maximum of of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-3.85	3.85	-3.81	3.81
A2	-3.85	3.85	-3.81	3.81
FD	-3.85	3.85	-3.84	3.81
L1	-3.85	3.85	-3.84	3.84
L3	-3.85	3.85	-3.84	3.84
L4	-3.85	3.85	-3.84	3.84
NF	—	—	—	—
NS	-3.85	3.85	-3.81	3.84

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.3
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–31. Time history of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–61. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-3.25E-03	5.14	-4	4.92E-03	-25
A2	-3.25E-03	5.14	-4	4.92E-03	-25
FD	1.52E-03	5.13	-8	2.26E-03	21
L1	-2.12E-03	5.13	-4	3.38E-03	-37
L3	-2.12E-03	5.13	-4	3.38E-03	-37
L4	-2.12E-03	5.13	-4	3.38E-03	-37
NF	—	—	—	—	—
NS	-1.13E-03	5.13	0	1.68E-03	-17

Table G–62. Minimum and maximum of of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-5.14	5.14	-5.09	5.09
A2	-5.14	5.14	-5.09	5.09
FD	-5.13	5.13	-5.12	5.08
L1	-5.13	5.13	-5.11	5.12
L3	-5.13	5.13	-5.11	5.12
L4	-5.13	5.13	-5.11	5.12
NF	—	—	—	—
NS	-5.13	5.13	-5.10	5.13

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–32. Time history of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–63. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-4.87E-03	7.71	-4	7.39E-03	-25
A2	-4.87E-03	7.71	-4	7.39E-03	-25
FD	2.27E-03	7.70	-8	3.38E-03	21
L1	-3.18E-03	7.70	-4	5.06E-03	-37
L3	-3.18E-03	7.70	-4	5.06E-03	-37
L4	-3.18E-03	7.70	-4	5.06E-03	-37
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–64. Minimum and maximum of of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (m)	Maximum (m)	Filtered Minimum (m)	Maximum (m)
A1	-7.71	7.71	-7.63	7.63
A2	-7.71	7.71	-7.63	7.63
FD	-7.70	7.70	-7.68	7.62
L1	-7.70	7.70	-7.67	7.67
L3	-7.70	7.70	-7.67	7.67
L4	-7.70	7.70	-7.67	7.67
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.3
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–33. Time history of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–65. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-5.32E-04	1.28	-3	8.11E-04	-21
A2	-5.32E-04	1.28	-3	8.11E-04	-21
FD	3.19E-05	1.28	1	5.08E-05	164
L1	-1.63E-04	1.28	-3	2.55E-04	-54
L3	-1.63E-04	1.28	-3	2.55E-04	-54
L4	-1.63E-04	1.28	-3	2.55E-04	-54
NF	—	—	—	—	—
NS	1.34E-04	1.28	0	1.98E-04	162

Table G–66. Minimum and maximum of of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered		Filtered	
	Minimum (m)	Maximum (m)	Minimum (m)	Maximum (m)
A1	-1.28	1.28	-1.25	1.29
A2	-1.28	1.28	-1.25	1.29
FD	-1.28	1.28	-1.25	1.25
L1	-1.28	1.28	-1.27	1.27
L3	-1.28	1.28	-1.27	1.27
L4	-1.28	1.28	-1.27	1.27
NF	—	—	—	—
NS	-1.28	1.28	-1.27	1.27

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 135; Fn=0.3
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–34. Time history of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–67. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-1.60E-03	3.85	-3	2.44E-03	-21
A2	-1.60E-03	3.85	-3	2.44E-03	-21
FD	9.70E-05	3.85	1	1.52E-04	164
L1	-4.88E-04	3.85	-3	7.66E-04	-54
L3	-4.88E-04	3.85	-3	7.66E-04	-54
L4	-4.88E-04	3.85	-3	7.66E-04	-54
NF	—	—	—	—	—
NS	4.01E-04	3.85	0	5.94E-04	162

Table G–68. Minimum and maximum of of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-3.85	3.85	-3.76	3.87
A2	-3.85	3.85	-3.76	3.87
FD	-3.85	3.85	-3.76	3.76
L1	-3.85	3.85	-3.82	3.82
L3	-3.85	3.85	-3.82	3.82
L4	-3.85	3.85	-3.82	3.82
NF	—	—	—	—
NS	-3.85	3.85	-3.81	3.81

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.3
eta (m)

Data identically zero, insufficient, or not available from NFA.

Figure G–35. Time history of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–69. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-2.14E-03	5.14	-3	3.26E-03	-21
A2	-2.14E-03	5.14	-3	3.26E-03	-21
FD	1.29E-04	5.13	1	2.02E-04	164
L1	-6.51E-04	5.13	-3	1.02E-03	-54
L3	-6.51E-04	5.13	-3	1.02E-03	-54
L4	-6.51E-04	5.13	-3	1.02E-03	-54
NF	—	—	—	—	—
NS	5.36E-04	5.13	0	7.92E-04	162

Table G–70. Minimum and maximum of of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

| Code | Unfiltered | | Filtered | |
| | Minimum | Maximum | Minimum | Maximum |
	(m)	(m)	(m)	(m)
A1	-5.14	5.14	-5.01	5.16
A2	-5.14	5.14	-5.01	5.16
FD	-5.13	5.13	-5.01	5.01
L1	-5.13	5.13	-5.09	5.09
L3	-5.13	5.13	-5.09	5.09
L4	-5.13	5.13	-5.09	5.09
NF	—	—	—	—
NS	-5.13	5.13	-5.10	5.10

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 135; Fn=0.3
eta (m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–36. Time history of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–71. Coefficients of the Fourier fit $a_0 + a_1 \sin (\omega t + \Phi_1) + a_2 \sin (2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-3.21E-03	7.71	-3	4.88E-03	-21
A2	-3.21E-03	7.71	-3	4.88E-03	-21
FD	1.93E-04	7.70	1	3.03E-04	164
L1	-9.76E-04	7.70	-3	1.53E-03	-54
L3	-9.76E-04	7.70	-3	1.53E-03	-54
L4	-9.76E-04	7.70	-3	1.53E-03	-54
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–72. Minimum and maximum of of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (m)	Maximum (m)	Filtered Minimum (m)	Maximum (m)
A1	-7.70	7.71	-7.52	7.75
A2	-7.70	7.71	-7.52	7.75
FD	-7.70	7.70	-7.51	7.51
L1	-7.70	7.70	-7.63	7.63
L3	-7.70	7.70	-7.63	7.63
L4	-7.70	7.70	-7.63	7.63
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–37. Time history of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–73. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-1.33E-03	1.28	-8	2.07E-03	-39
A2	-1.33E-03	1.28	-8	2.07E-03	-39
FD	-3.62E-04	1.28	-36	2.19E-03	-88
L1	8.56E-04	1.28	-14	2.80E-03	0
L3	8.56E-04	1.28	-14	2.80E-03	0
L4	8.56E-04	1.28	-14	2.80E-03	0
NF	—	—	—	—	—
NS	-7.40E-04	1.28	-1	1.10E-03	-17

Table G–74. Minimum and maximum of of η for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(m)	(m)	(m)	(m)
A1	-1.28	1.28	-1.24	1.27
A2	-1.28	1.28	-1.24	1.27
FD	-1.28	1.28	-1.24	1.24
L1	-1.28	1.28	-1.27	1.27
L3	-1.28	1.28	-1.27	1.27
L4	-1.28	1.28	-1.27	1.27
NF	—	—	—	—
NS	-1.28	1.28	-1.27	1.27

Figure G–38. Time history of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–75. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-3.99E-03	3.85	-8	6.23E-03	-39
A2	-3.99E-03	3.85	-8	6.23E-03	-39
FD	-1.09E-03	3.85	-36	6.58E-03	-88
L1	2.57E-03	3.85	-14	8.40E-03	0
L3	2.57E-03	3.85	-14	8.40E-03	0
L4	2.57E-03	3.85	-14	8.40E-03	0
NF	-3.19E-03	3.85	86	0.308	82
NS	-2.22E-03	3.85	-1	3.30E-03	-17

Table G–76. Minimum and maximum of of η for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (m)	Unfiltered Maximum (m)	Filtered Minimum (m)	Filtered Maximum (m)
A1	-3.85	3.85	-3.73	3.81
A2	-3.85	3.85	-3.73	3.81
FD	-3.85	3.85	-3.73	3.73
L1	-3.85	3.85	-3.81	3.81
L3	-3.85	3.85	-3.81	3.81
L4	-3.85	3.85	-3.81	3.81
NF	-3.54	4.15	-3.40	3.89
NS	-3.85	3.85	-3.81	3.81

Figure G–39. Time history of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–77. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-5.33E-03	5.14	-8	8.31E-03	-39
A2	-5.33E-03	5.14	-8	8.31E-03	-39
FD	-1.45E-03	5.14	-36	8.77E-03	-88
L1	3.42E-03	5.14	-14	1.12E-02	0
L3	3.42E-03	5.14	-14	1.12E-02	0
L4	3.42E-03	5.14	-14	1.12E-02	0
NF	-3.65E-03	5.13	88	0.543	85
NS	-2.97E-03	5.13	-1	4.41E-03	-17

Table G–78. Minimum and maximum of of η for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (m)	Unfiltered Maximum (m)	Filtered Minimum (m)	Filtered Maximum (m)
A1	-5.14	5.14	-4.98	5.08
A2	-5.14	5.14	-4.98	5.08
FD	-5.13	5.13	-4.97	4.97
L1	-5.13	5.13	-5.08	5.08
L3	-5.13	5.13	-5.08	5.08
L4	-5.13	5.13	-5.08	5.08
NF	-4.59	5.67	-4.43	5.28
NS	-5.13	5.13	-5.10	5.10

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 180; Fn=0.3
eta (m)

Data identically zero, insufficient, or not available from NSHIPMO.

Figure G–40. Time history of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–79. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (m)	a_1 (m)	Φ_1 (deg)	a_2 (m)	Φ_2 (deg)
A1	-8.00E-03	7.71	-8	1.25E-02	-39
A2	-8.00E-03	7.71	-8	1.25E-02	-39
FD	-2.17E-03	7.70	-36	1.32E-02	-88
L1	5.14E-03	7.70	-14	1.68E-02	0
L3	5.14E-03	7.70	-14	1.68E-02	0
L4	5.14E-03	7.70	-14	1.68E-02	0
NF	-1.90E-02	7.71	69	1.24	48
NS	—	—	—	—	—

Table G–80. Minimum and maximum of of η for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered		Filtered	
	Minimum (m)	Maximum (m)	Minimum (m)	Maximum (m)
A1	-7.71	7.71	-7.47	7.62
A2	-7.71	7.71	-7.47	7.62
FD	-7.70	7.70	-7.46	7.45
L1	-7.70	7.70	-7.61	7.61
L3	-7.70	7.70	-7.61	7.61
L4	-7.70	7.70	-7.61	7.61
NF	-6.49	8.91	-6.45	8.75
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 0; Fn=0.0
fptot_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–41. Time history of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–81. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.61	887.	114	1.20	29
A2	23.4	913.	110	73.5	-150
FD	-9.28	1.42E+03	89	77.1	-147
L1	0.880	760.	101	2.96	89
L3	-37.6	766.	103	69.5	-134
L4	13.0	793.	104	26.8	-73
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–82. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-890.	886.	-881.	877.
A2	-883.	928.	-857.	920.
FD	-1.49E+03	1.37E+03	-1.47E+03	1.36E+03
L1	-757.	764.	-754.	761.
L3	-846.	713.	-842.	710.
L4	-814.	779.	-805.	772.
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.0
fptot_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–42. Time history of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–83. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-4.84	2.67E+03	114	3.62	29
A2	89.3	2.65E+03	108	666.	-156
FD	-1.12	4.30E+03	90	652.	-157
L1	12.3	2.28E+03	101	23.6	84
L3	-18.5	2.07E+03	105	540.	-149
L4	421.	2.29E+03	106	211.	-115
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–84. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.68E+03	2.67E+03	-2.65E+03	2.64E+03
A2	-2.79E+03	3.10E+03	-2.72E+03	3.04E+03
FD	-4.82E+03	4.10E+03	-4.71E+03	4.06E+03
L1	-2.25E+03	2.31E+03	-2.24E+03	2.31E+03
L3	-2.44E+03	2.18E+03	-2.41E+03	2.17E+03
L4	-2.25E+03	2.56E+03	-2.14E+03	2.54E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 0; Fn=0.0
fptot_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–43. Time history of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–85. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-6.46	3.56E+03	114	4.83	29
A2	107.	3.71E+03	111	1.09E+03	-158
FD	4.34	5.70E+03	91	1.07E+03	-160
L1	22.9	3.04E+03	101	41.3	83
L3	-3.25	2.54E+03	108	837.	-154
L4	719.	2.90E+03	109	306.	-130
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–86. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-3.57E+03	3.56E+03	-3.54E+03	3.52E+03
A2	-3.80E+03	4.55E+03	-3.74E+03	4.45E+03
FD	-6.39E+03	5.51E+03	-6.28E+03	5.46E+03
L1	-2.98E+03	3.10E+03	-2.97E+03	3.09E+03
L3	-2.96E+03	2.91E+03	-2.93E+03	2.89E+03
L4	-2.42E+03	3.46E+03	-2.30E+03	3.41E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–44. Time history of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–87. Coefficients of the Fourier fit $a_0 + a_1 \sin (\omega t + \Phi_1) + a_2 \sin (2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-9.69	5.34E+03	114	7.25	29
A2	457.	6.76E+03	115	2.92E+03	-157
FD	9.90	8.58E+03	93	2.05E+03	-159
L1	53.7	4.56E+03	101	91.5	83
L3	30.3	3.32E+03	116	1.39E+03	-154
L4	1.20E+03	3.62E+03	119	524.	-108
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–88. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-5.36E+03	5.34E+03	-5.31E+03	5.28E+03
A2	-7.17E+03	9.81E+03	-6.78E+03	9.81E+03
FD	-9.83E+03	8.67E+03	-9.63E+03	8.55E+03
L1	-4.43E+03	4.70E+03	-4.41E+03	4.68E+03
L3	-3.81E+03	4.36E+03	-3.77E+03	4.33E+03
L4	-2.60E+03	5.27E+03	-2.27E+03	5.13E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 45; Fn=0.0
fptot_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–45. Time history of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–89. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.64	1.25E+03	108	1.61	35
A2	22.1	1.26E+03	101	48.2	166
FD	-9.94	1.76E+03	84	42.0	168
L1	8.24	1.06E+03	100	8.49	173
L3	-30.7	1.07E+03	101	58.1	179
L4	19.2	1.10E+03	101	47.0	161
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–90. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.26E+03	1.25E+03	-1.24E+03	1.24E+03
A2	-1.25E+03	1.31E+03	-1.22E+03	1.30E+03
FD	-1.77E+03	1.75E+03	-1.75E+03	1.74E+03
L1	-1.05E+03	1.07E+03	-1.04E+03	1.07E+03
L3	-1.08E+03	1.06E+03	-1.07E+03	1.06E+03
L4	-1.06E+03	1.17E+03	-1.05E+03	1.16E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 45; Fn=0.0
fptot_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–46. Time history of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–91. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-4.94	3.77E+03	108	4.84	35
A2	48.6	3.95E+03	102	306.	158
FD	-14.9	5.44E+03	85	288.	161
L1	77.3	3.18E+03	100	71.5	173
L3	35.0	3.00E+03	103	351.	171
L4	451.	3.14E+03	103	392.	146
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–92. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-3.78E+03	3.77E+03	-3.74E+03	3.73E+03
A2	-3.73E+03	4.31E+03	-3.69E+03	4.25E+03
FD	-5.38E+03	5.51E+03	-5.32E+03	5.45E+03
L1	-3.07E+03	3.29E+03	-3.06E+03	3.28E+03
L3	-2.79E+03	3.30E+03	-2.78E+03	3.29E+03
L4	-2.34E+03	4.01E+03	-2.32E+03	3.98E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 45; Fn=0.0
fptot_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–47. Time history of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–93. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-6.60	5.04E+03	108	6.46	35
A2	83.4	5.53E+03	104	466.	154
FD	-22.3	7.32E+03	86	393.	159
L1	138.	4.24E+03	100	126.	173
L3	93.9	3.81E+03	105	479.	171
L4	718.	3.91E+03	105	595.	133
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–94. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-5.04E+03	5.04E+03	-5.00E+03	4.98E+03
A2	-5.38E+03	6.24E+03	-5.23E+03	6.16E+03
FD	-7.26E+03	7.47E+03	-7.19E+03	7.39E+03
L1	-4.05E+03	4.44E+03	-4.04E+03	4.42E+03
L3	-3.51E+03	4.35E+03	-3.50E+03	4.33E+03
L4	-2.69E+03	5.38E+03	-2.66E+03	5.33E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 45; Fn=0.0
fptot_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–48. Time history of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–95. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-9.90	7.56E+03	108	9.69	35
A2	160.	9.50E+03	105	827.	155
FD	-36.5	1.14E+04	88	576.	162
L1	312.	6.36E+03	100	281.	173
L3	269.	5.33E+03	110	723.	174
L4	1.12E+03	4.87E+03	112	891.	108
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–96. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-7.57E+03	7.55E+03	-7.49E+03	7.48E+03
A2	-9.53E+03	1.08E+04	-9.42E+03	1.05E+04
FD	-1.15E+04	1.18E+04	-1.14E+04	1.17E+04
L1	-5.94E+03	6.82E+03	-5.92E+03	6.79E+03
L3	-4.83E+03	6.35E+03	-4.81E+03	6.32E+03
L4	-3.58E+03	7.42E+03	-3.29E+03	7.14E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.0
fptot_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–49. Time history of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–97. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.00	202.	158	0.675	130
A2	25.1	176.	155	8.33	-101
FD	-9.08	1.02	172	3.73E-02	109
L1	11.6	249.	-160	10.3	118
L3	-27.1	242.	-160	10.1	119
L4	-45.3	224.	-160	50.5	133
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–98. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-203.	204.	-201.	202.
A2	-151.	212.	-150.	210.
FD	-10.7	-8.02	-10.5	-8.03
L1	-248.	251.	-247.	250.
L3	-279.	205.	-278.	204.
L4	-323.	162.	-321.	134.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–50. Time history of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–99. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	3.01	608.	158	2.03	130
A2	53.7	402.	153	73.3	-109
FD	-7.28	1.09	172	1.27	-106
L1	103.	748.	-160	91.8	118
L3	65.5	724.	-160	91.2	118
L4	-95.5	616.	-156	396.	127
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–100. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-611.	615.	-605.	608.
A2	-1.68E+03	574.	-312.	528.
FD	-9.27	-4.90	-8.70	-4.96
L1	-734.	764.	-731.	762.
L3	-747.	702.	-744.	700.
L4	-1.25E+03	527.	-1.14E+03	481.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–51. Time history of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–101. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	4.02	812.	158	2.71	130
A2	98.5	546.	151	66.2	-108
FD	-6.05	2.53	171	2.21	-107
L1	184.	997.	-160	163.	118
L3	145.	962.	-160	163.	118
L4	-225.	865.	-157	733.	125
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–102. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-816.	821.	-808.	812.
A2	-432.	703.	-410.	686.
FD	-9.05	-0.689	-8.39	-0.811
L1	-974.	1.03E+03	-968.	1.03E+03
L3	-976.	956.	-970.	954.
L4	-2.04E+03	829.	-1.90E+03	666.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–52. Time history of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–103. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	6.03	1.22E+03	158	4.07	130
A2	159.	883.	151	103.	-109
FD	-4.72	3.42	173	2.35	-103
L1	413.	1.50E+03	-160	366.	118
L3	372.	1.43E+03	-160	369.	118
L4	-606.	1.75E+03	-156	1.66E+03	125
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–104. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.22E+03	1.23E+03	-1.21E+03	1.22E+03
A2	-764.	1.14E+03	-694.	1.13E+03
FD	-8.60	0.436	-7.91	0.125
L1	-1.44E+03	1.60E+03	-1.43E+03	1.60E+03
L3	-1.42E+03	1.51E+03	-1.41E+03	1.51E+03
L4	-4.70E+03	1.44E+03	-4.32E+03	1.20E+03
NF	—	—	—	—
NS	—	—	—	—

G–345

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–53. Time history of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–105. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	2.25	1.31E+03	-75	1.84	-162
A2	26.9	1.33E+03	-79	53.7	-31
FD	-8.52	1.75E+03	-100	42.4	-21
L1	8.36	1.23E+03	-87	11.5	-78
L3	-30.4	1.23E+03	-87	56.6	-27
L4	-68.4	1.26E+03	-87	45.7	-86
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–106. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.30E+03	1.31E+03	-1.29E+03	1.30E+03
A2	-1.36E+03	1.35E+03	-1.35E+03	1.33E+03
FD	-1.76E+03	1.75E+03	-1.76E+03	1.73E+03
L1	-1.23E+03	1.22E+03	-1.22E+03	1.22E+03
L3	-1.29E+03	1.17E+03	-1.29E+03	1.17E+03
L4	-1.38E+03	1.14E+03	-1.37E+03	1.14E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 135; Fn=0.0
fptot_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–54. Time history of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–107. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	6.77	3.93E+03	-75	5.54	-162
A2	69.7	4.08E+03	-82	280.	-8
FD	-7.28	5.43E+03	-101	297.	-15
L1	67.4	3.68E+03	-87	98.1	-78
L3	26.5	3.47E+03	-87	342.	-25
L4	-354.	3.71E+03	-86	431.	-88
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–108. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-3.92E+03	3.94E+03	-3.88E+03	3.90E+03
A2	-4.01E+03	4.11E+03	-3.98E+03	4.01E+03
FD	-5.35E+03	5.49E+03	-5.34E+03	5.43E+03
L1	-3.71E+03	3.65E+03	-3.70E+03	3.63E+03
L3	-3.50E+03	3.33E+03	-3.49E+03	3.32E+03
L4	-4.52E+03	2.96E+03	-4.50E+03	2.94E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.0
fptot_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–55. Time history of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–109. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	9.03	5.25E+03	-75	7.39	-162
A2	121.	5.67E+03	-84	429.	-3
FD	-11.2	7.33E+03	-102	424.	-15
L1	118.	4.90E+03	-87	173.	-78
L3	75.3	4.40E+03	-88	470.	-28
L4	-579.	4.69E+03	-85	666.	-92
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–110. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-5.23E+03	5.26E+03	-5.18E+03	5.21E+03
A2	-5.41E+03	6.87E+03	-5.36E+03	5.77E+03
FD	-7.23E+03	7.45E+03	-7.24E+03	7.37E+03
L1	-4.96E+03	4.85E+03	-4.94E+03	4.83E+03
L3	-4.41E+03	4.25E+03	-4.40E+03	4.23E+03
L4	-5.96E+03	3.53E+03	-5.90E+03	3.48E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–56. Time history of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–111. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	13.5	7.87E+03	-75	11.1	-162
A2	132.	9.54E+03	-89	772.	-17
FD	-29.7	1.15E+04	-104	667.	-16
L1	262.	7.35E+03	-87	388.	-77
L3	215.	6.07E+03	-90	721.	-39
L4	-889.	5.94E+03	-87	1.07E+03	-111
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–112. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-7.84E+03	7.88E+03	-7.77E+03	7.81E+03
A2	-9.53E+03	9.89E+03	-9.41E+03	9.69E+03
FD	-1.15E+04	1.18E+04	-1.15E+04	1.16E+04
L1	-7.48E+03	7.23E+03	-7.45E+03	7.21E+03
L3	-6.16E+03	5.93E+03	-6.13E+03	5.91E+03
L4	-8.25E+03	7.26E+03	-8.09E+03	4.63E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–57. Time history of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–113. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.56	1.05E+03	-71	1.37	-157
A2	26.6	1.05E+03	-74	77.2	-54
FD	-8.47	1.41E+03	-102	76.9	-64
L1	13.6	916.	-83	3.48	-110
L3	-25.0	919.	-83	73.6	-67
L4	-50.3	941.	-84	36.8	-88
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–114. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.04E+03	1.05E+03	-1.03E+03	1.04E+03
A2	-1.14E+03	1.04E+03	-1.13E+03	1.03E+03
FD	-1.48E+03	1.36E+03	-1.47E+03	1.34E+03
L1	-906.	927.	-902.	924.
L3	-1.02E+03	826.	-1.02E+03	823.
L4	-1.04E+03	867.	-1.03E+03	855.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–58. Time history of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–115. Coefficients of the Fourier fit $a_0+a_1 \sin (\omega t + \Phi_1)+a_2 \sin (2\omega t + \Phi_2)+$ $\cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	4.68	3.15E+03	-71	4.12	-157
A2	84.1	3.07E+03	-76	671.	-55
FD	2.89	4.24E+03	-103	630.	-55
L1	117.	2.75E+03	-83	28.9	-118
L3	89.4	2.48E+03	-82	543.	-53
L4	-219.	2.82E+03	-86	386.	-84
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–116. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-3.13E+03	3.15E+03	-3.10E+03	3.12E+03
A2	-4.49E+03	2.59E+03	-3.76E+03	2.55E+03
FD	-4.82E+03	4.03E+03	-4.72E+03	3.99E+03
L1	-2.65E+03	2.85E+03	-2.64E+03	2.84E+03
L3	-3.16E+03	2.12E+03	-3.12E+03	2.12E+03
L4	-3.65E+03	2.44E+03	-3.51E+03	2.32E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–59. Time history of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–117. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	6.25	4.20E+03	-71	5.50	-157
A2	126.	4.05E+03	-79	1.12E+03	-52
FD	12.8	5.59E+03	-104	1.04E+03	-53
L1	208.	3.66E+03	-83	51.0	-119
L3	186.	3.04E+03	-82	839.	-50
L4	-346.	3.56E+03	-85	602.	-80
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–118. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-4.18E+03	4.20E+03	-4.14E+03	4.16E+03
A2	-5.34E+03	3.30E+03	-5.20E+03	3.27E+03
FD	-6.41E+03	5.40E+03	-6.29E+03	5.35E+03
L1	-3.50E+03	3.84E+03	-3.48E+03	3.82E+03
L3	-3.98E+03	2.60E+03	-3.94E+03	2.59E+03
L4	-4.67E+03	3.00E+03	-4.62E+03	2.78E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–60. Time history of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–119. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	9.37	6.31E+03	-71	8.25	-157
A2	439.	6.47E+03	-90	2.87E+03	-53
FD	32.4	8.40E+03	-107	2.00E+03	-54
L1	465.	5.50E+03	-83	114.	-120
L3	451.	3.88E+03	-83	1.43E+03	-51
L4	-513.	4.38E+03	-86	962.	-82
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–120. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-6.28E+03	6.31E+03	-6.21E+03	6.24E+03
A2	-9.44E+03	6.26E+03	-9.13E+03	5.80E+03
FD	-9.86E+03	8.46E+03	-9.66E+03	8.34E+03
L1	-5.12E+03	5.88E+03	-5.10E+03	5.87E+03
L3	-5.27E+03	3.66E+03	-5.21E+03	3.65E+03
L4	-6.81E+03	5.26E+03	-5.86E+03	3.42E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 0; Fn=0.3
fptot_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–61. Time history of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–121. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.206	744.	89	2.44	-120
A2	25.0	794.	87	76.6	-143
FD	-8.78	1.43E+03	93	76.3	-135
L1	-26.9	968.	100	2.67	-113
L3	-65.3	968.	101	74.5	-124
L4	146.	1.39E+03	124	234.	-97
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–122. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-745.	742.	-744.	742.
A2	-860.	773.	-846.	765.
FD	-1.49E+03	1.38E+03	-1.49E+03	1.38E+03
L1	-997.	939.	-996.	939.
L3	-1.09E+03	867.	-1.09E+03	867.
L4	-1.40E+03	1.68E+03	-1.39E+03	1.62E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.3
fptot_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–62. Time history of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–123. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.620	2.24E+03	89	7.34	-120
A2	84.2	2.34E+03	91	656.	-142
FD	2.40	4.31E+03	94	627.	-146
L1	94.2	2.90E+03	100	25.1	-101
L3	63.1	2.66E+03	103	574.	-138
L4	576.	3.68E+03	119	849.	-106
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–124. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.24E+03	2.23E+03	-2.24E+03	2.23E+03
A2	-2.99E+03	2.36E+03	-2.92E+03	2.36E+03
FD	-4.86E+03	4.10E+03	-4.85E+03	4.10E+03
L1	-2.83E+03	2.98E+03	-2.83E+03	2.98E+03
L3	-3.06E+03	2.69E+03	-3.06E+03	2.69E+03
L4	-3.82E+03	4.44E+03	-3.79E+03	4.38E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–63. Time history of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–125. Coefficients of the Fourier fit $a_0 + a_1 \sin (\omega t + \Phi_1) + a_2 \sin (2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.827	2.99E+03	89	9.80	-120
A2	111.	3.20E+03	95	1.10E+03	-145
FD	9.15	5.69E+03	95	1.03E+03	-149
L1	201.	3.87E+03	100	45.0	-100
L3	172.	3.31E+03	104	888.	-142
L4	713.	4.57E+03	118	1.14E+03	-113
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–126. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.99E+03	2.98E+03	-2.99E+03	2.98E+03
A2	-4.21E+03	3.38E+03	-4.13E+03	3.38E+03
FD	-6.45E+03	5.50E+03	-6.45E+03	5.50E+03
L1	-3.71E+03	4.03E+03	-3.71E+03	4.03E+03
L3	-3.73E+03	3.60E+03	-3.72E+03	3.60E+03
L4	-4.83E+03	5.65E+03	-4.64E+03	5.53E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta =   0; Fn=0.3
fptot_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–64. Time history of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–127. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.24	4.48E+03	89	14.7	-120
A2	432.	5.73E+03	103	2.89E+03	-143
FD	21.3	8.56E+03	98	1.97E+03	-148
L1	506.	5.81E+03	100	102.	-98
L3	475.	4.41E+03	109	1.50E+03	-141
L4	982.	5.55E+03	117	1.46E+03	-112
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–128. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-4.49E+03	4.47E+03	-4.48E+03	4.47E+03
A2	-7.60E+03	7.89E+03	-7.53E+03	7.82E+03
FD	-9.92E+03	8.63E+03	-9.91E+03	8.62E+03
L1	-5.39E+03	6.22E+03	-5.39E+03	6.22E+03
L3	-4.84E+03	5.52E+03	-4.84E+03	5.52E+03
L4	-6.00E+03	7.59E+03	-5.58E+03	7.04E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–65. Time history of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–129. Coefficients of the Fourier fit $a_0+a_1\sin(\omega t+\Phi_1)+a_2\sin(2\omega t+\Phi_2)+$ $\cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	3.63	1.27E+03	118	2.53	-166
A2	26.8	1.32E+03	114	52.0	-178
FD	-8.97	1.77E+03	97	41.9	-164
L1	-29.1	1.24E+03	111	8.71	-126
L3	-67.8	1.24E+03	111	56.7	-162
L4	160.	1.99E+03	115	222.	166
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–130. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.27E+03	1.29E+03	-1.27E+03	1.28E+03
A2	-1.28E+03	1.39E+03	-1.28E+03	1.38E+03
FD	-1.78E+03	1.76E+03	-1.77E+03	1.75E+03
L1	-1.27E+03	1.21E+03	-1.27E+03	1.21E+03
L3	-1.29E+03	1.20E+03	-1.29E+03	1.20E+03
L4	-1.64E+03	2.29E+03	-1.62E+03	2.29E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–66. Time history of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–131. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	10.9	3.83E+03	118	7.62	-166
A2	80.3	4.14E+03	115	303.	175
FD	-8.10	5.45E+03	98	294.	-170
L1	70.3	3.71E+03	111	77.5	-126
L3	33.8	3.54E+03	113	347.	-164
L4	609.	5.26E+03	114	709.	-176
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–132. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-3.82E+03	3.87E+03	-3.82E+03	3.86E+03
A2	-3.90E+03	4.58E+03	-3.90E+03	4.57E+03
FD	-5.39E+03	5.52E+03	-5.38E+03	5.50E+03
L1	-3.66E+03	3.77E+03	-3.66E+03	3.77E+03
L3	-3.37E+03	3.81E+03	-3.37E+03	3.81E+03
L4	-4.26E+03	6.30E+03	-4.18E+03	6.21E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–67. Time history of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–133. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	14.6	5.11E+03	118	10.2	-166
A2	114.	5.80E+03	115	478.	173
FD	-7.31	7.34E+03	99	416.	-170
L1	157.	4.95E+03	111	138.	-126
L3	121.	4.54E+03	115	483.	-162
L4	763.	6.53E+03	115	969.	-172
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–134. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-5.11E+03	5.16E+03	-5.09E+03	5.15E+03
A2	-5.53E+03	6.64E+03	-5.51E+03	6.56E+03
FD	-7.28E+03	7.48E+03	-7.26E+03	7.46E+03
L1	-4.83E+03	5.08E+03	-4.83E+03	5.08E+03
L3	-4.29E+03	5.05E+03	-4.29E+03	5.05E+03
L4	-5.29E+03	7.76E+03	-5.12E+03	7.73E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–68. Time history of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–135. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	21.9	7.67E+03	118	15.3	-166
A2	168.	9.97E+03	116	872.	177
FD	-2.60	1.14E+04	100	657.	-168
L1	405.	7.42E+03	111	309.	-126
L3	366.	6.45E+03	119	743.	-155
L4	1.07E+03	8.33E+03	116	1.18E+03	-171
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–136. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-7.66E+03	7.74E+03	-7.64E+03	7.72E+03
A2	-9.85E+03	1.14E+04	-9.83E+03	1.12E+04
FD	-1.15E+04	1.18E+04	-1.15E+04	1.18E+04
L1	-7.11E+03	7.79E+03	-7.10E+03	7.78E+03
L3	-6.03E+03	7.46E+03	-6.02E+03	7.46E+03
L4	-6.81E+03	1.17E+04	-6.60E+03	9.93E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.3
fptot_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–69. Time history of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–137. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.125	402.	162	0.985	-78
A2	24.2	343.	159	9.71	-96
FD	-9.08	1.02	172	3.73E-02	109
L1	-36.6	317.	175	20.4	79
L3	-75.2	309.	173	20.1	79
L4	154.	290.	-26	179.	-108
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–138. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-409.	410.	-405.	405.
A2	-324.	385.	-322.	381.
FD	-10.7	-8.02	-10.5	-8.03
L1	-374.	260.	-373.	259.
L3	-405.	214.	-403.	213.
L4	-183.	616.	-168.	610.
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.3
fptot_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–70. Time history of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–139. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.377	1.21E+03	162	2.96	-78
A2	51.0	904.	159	76.9	-106
FD	-7.28	1.09	172	1.27	-106
L1	3.34	951.	175	183.	79
L3	-34.6	925.	174	182.	79
L4	545.	668.	-25	303.	-109
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–140. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.23E+03	1.23E+03	-1.22E+03	1.22E+03
A2	-1.61E+03	1.08E+03	-824.	1.04E+03
FD	-9.26	-4.90	-8.70	-4.96
L1	-1.13E+03	772.	-1.13E+03	771.
L3	-1.14E+03	706.	-1.14E+03	706.
L4	-136.	1.61E+03	-43.4	1.55E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.3
fptot_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–71. Time history of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–141. Coefficients of the Fourier fit $a_0+a_1 \sin (\omega t + \Phi_1)+a_2 \sin (2\omega t + \Phi_2)+$ $\cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.503	1.61E+03	162	3.96	-78
A2	96.0	1.22E+03	158	72.0	-106
FD	-6.05	2.53	171	2.21	-107
L1	38.2	1.27E+03	175	326.	79
L3	-0.304	1.23E+03	174	326.	79
L4	668.	833.	-19	162.	-110
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–142. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.64E+03	1.65E+03	-1.62E+03	1.63E+03
A2	-1.07E+03	1.40E+03	-1.07E+03	1.38E+03
FD	-9.04	-0.689	-8.39	-0.811
L1	-1.56E+03	983.	-1.55E+03	983.
L3	-1.55E+03	911.	-1.55E+03	910.
L4	-169.	1.93E+03	-148.	1.82E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–72. Time history of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–143. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.755	2.42E+03	162	5.93	-78
A2	153.	1.89E+03	158	110.	-105
FD	-4.72	3.42	173	2.35	-103
L1	138.	1.90E+03	175	732.	79
L3	96.4	1.83E+03	174	735.	79
L4	959.	1.11E+03	-6	328.	-37
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–144. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.47E+03	2.47E+03	-2.44E+03	2.44E+03
A2	-1.79E+03	2.19E+03	-1.71E+03	2.17E+03
FD	-8.60	0.437	-7.91	0.125
L1	-2.50E+03	1.49E+03	-2.48E+03	1.49E+03
L3	-2.47E+03	1.43E+03	-2.45E+03	1.42E+03
L4	-4.45E+03	6.70E+03	-234.	3.19E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–73. Time history of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–145. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.68E-03	1.44E+03	-76	2.33	-114
A2	24.1	1.48E+03	-83	54.8	-32
FD	-9.30	1.76E+03	-91	41.5	-2
L1	-32.5	1.34E+03	-82	15.5	-95
L3	-71.0	1.35E+03	-82	54.2	-33
L4	157.	1.96E+03	-98	271.	-4
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–146. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.45E+03	1.44E+03	-1.41E+03	1.41E+03
A2	-1.52E+03	1.49E+03	-1.47E+03	1.46E+03
FD	-1.76E+03	1.75E+03	-1.75E+03	1.71E+03
L1	-1.38E+03	1.29E+03	-1.37E+03	1.28E+03
L3	-1.46E+03	1.24E+03	-1.44E+03	1.22E+03
L4	-1.79E+03	2.23E+03	-1.77E+03	2.21E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 135; Fn=0.3
fptot_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–74. Time history of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–147. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+ \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	4.69E-03	4.34E+03	-76	7.01	-114
A2	66.0	4.54E+03	-86	281.	-11
FD	-12.0	5.43E+03	-92	285.	6
L1	40.2	4.01E+03	-82	140.	-95
L3	3.22	3.82E+03	-82	316.	-35
L4	551.	5.57E+03	-97	935.	-14
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–148. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(kN)	(kN)	(kN)	(kN)
A1	-4.35E+03	4.34E+03	-4.25E+03	4.24E+03
A2	-4.46E+03	4.52E+03	-4.38E+03	4.40E+03
FD	-5.35E+03	5.50E+03	-5.33E+03	5.36E+03
L1	-4.10E+03	3.92E+03	-4.06E+03	3.89E+03
L3	-3.94E+03	3.54E+03	-3.91E+03	3.52E+03
L4	-5.25E+03	6.60E+03	-5.18E+03	6.48E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.3
fptot_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–75. Time history of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–149. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	6.58E-03	5.79E+03	-76	9.36	-114
A2	98.9	6.26E+03	-88	427.	-7
FD	-16.4	7.33E+03	-93	393.	6
L1	104.	5.35E+03	-82	249.	-95
L3	64.9	4.87E+03	-83	444.	-43
L4	700.	7.05E+03	-97	1.26E+03	-20
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–150. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-5.81E+03	5.79E+03	-5.67E+03	5.65E+03
A2	-6.04E+03	6.32E+03	-5.92E+03	6.15E+03
FD	-7.24E+03	7.45E+03	-7.22E+03	7.26E+03
L1	-5.48E+03	5.22E+03	-5.43E+03	5.18E+03
L3	-4.97E+03	4.50E+03	-4.93E+03	4.48E+03
L4	-6.77E+03	8.26E+03	-6.63E+03	8.15E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–76. Time history of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–151. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	9.97E-03	8.69E+03	-76	14.0	-114
A2	155.	1.05E+04	-92	815.	-21
FD	-25.9	1.15E+04	-95	585.	2
L1	285.	8.02E+03	-82	561.	-95
L3	238.	6.77E+03	-84	770.	-59
L4	1.06E+03	9.53E+03	-96	1.59E+03	-22
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–152. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-8.71E+03	8.69E+03	-8.51E+03	8.48E+03
A2	-1.05E+04	1.08E+04	-1.04E+04	1.05E+04
FD	-1.15E+04	1.18E+04	-1.15E+04	1.15E+04
L1	-8.27E+03	7.80E+03	-8.18E+03	7.74E+03
L3	-6.97E+03	6.28E+03	-6.90E+03	6.24E+03
L4	-9.20E+03	1.67E+04	-9.08E+03	1.27E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–77. Time history of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–153. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-2.21	1.23E+03	-79	1.49	160
A2	22.2	1.21E+03	-87	75.5	-65
FD	-7.23	1.42E+03	-130	77.9	-123
L1	-24.1	1.05E+03	-87	4.79	-101
L3	-62.4	1.06E+03	-87	75.7	-89
L4	117.	1.04E+03	-116	235.	-125
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–154. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.24E+03	1.23E+03	-1.20E+03	1.19E+03
A2	-1.31E+03	1.20E+03	-1.25E+03	1.15E+03
FD	-1.49E+03	1.36E+03	-1.46E+03	1.33E+03
L1	-1.08E+03	1.02E+03	-1.07E+03	1.01E+03
L3	-1.21E+03	930.	-1.19E+03	920.
L4	-1.40E+03	1.22E+03	-1.24E+03	1.03E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 180; Fn=0.3
fptot_x (kN)

Data identically zero, insufficient, or not available from NSHIPMO.

Figure G–78. Time history of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–155. Coefficients of the Fourier fit $a_0 + a_1 \sin (\omega t + \Phi_1) + a_2 \sin (2\omega t + \Phi_2) +$ $\cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-6.64	3.71E+03	-79	4.49	160
A2	71.8	3.56E+03	-89	653.	-66
FD	4.09	4.27E+03	-131	648.	-112
L1	103.	3.15E+03	-87	35.2	-105
L3	75.2	2.91E+03	-86	562.	-75
L4	343.	2.87E+03	-115	1.00E+03	-120
NF	-1.05E+03	3.95E+03	14	380.	148
NS	—	—	—	—	—

Table G–156. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-3.72E+03	3.70E+03	-3.60E+03	3.59E+03
A2	-4.25E+03	3.10E+03	-4.03E+03	3.03E+03
FD	-4.86E+03	4.04E+03	-4.57E+03	3.94E+03
L1	-3.08E+03	3.22E+03	-3.05E+03	3.19E+03
L3	-3.63E+03	2.51E+03	-3.54E+03	2.50E+03
L4	-4.48E+03	3.99E+03	-3.88E+03	2.95E+03
NF	-5.32E+03	2.61E+03	-5.04E+03	2.46E+03
NS	—	—	—	—

Data identically zero, insufficient, or not available from NSHIPMO.

Figure G–79. Time history of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–157. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-8.86	4.95E+03	-79	6.00	160
A2	97.0	4.75E+03	-92	1.10E+03	-64
FD	12.7	5.64E+03	-132	1.07E+03	-109
L1	212.	4.20E+03	-87	60.9	-105
L3	188.	3.62E+03	-85	877.	-72
L4	483.	3.48E+03	-118	1.39E+03	-119
NF	-1.46E+03	5.28E+03	17	666.	157
NS	—	—	—	—	—

Table G–158. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-4.96E+03	4.94E+03	-4.81E+03	4.79E+03
A2	-6.00E+03	3.98E+03	-5.59E+03	3.96E+03
FD	-6.46E+03	5.40E+03	-6.10E+03	5.25E+03
L1	-4.05E+03	4.36E+03	-4.00E+03	4.31E+03
L3	-4.63E+03	3.07E+03	-4.51E+03	3.05E+03
L4	-5.33E+03	5.06E+03	-4.86E+03	3.78E+03
NF	-7.28E+03	3.33E+03	-6.88E+03	3.23E+03
NS	—	—	—	—

Data identically zero, insufficient, or not available from NSHIPMO.

Figure G–80. Time history of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–159. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-13.3	7.43E+03	-79	9.00	160
A2	426.	7.67E+03	-101	2.89E+03	-64
FD	29.9	8.46E+03	-134	2.05E+03	-109
L1	524.	6.30E+03	-87	133.	-106
L3	501.	4.77E+03	-85	1.51E+03	-72
L4	932.	4.43E+03	-125	2.26E+03	-111
NF	-2.09E+03	7.76E+03	6	1.47E+03	135
NS	—	—	—	—	—

Table G–160. Minimum and maximum of of F_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-7.45E+03	7.42E+03	-7.22E+03	7.19E+03
A2	-1.04E+04	7.32E+03	-9.58E+03	7.13E+03
FD	-9.95E+03	8.45E+03	-9.34E+03	8.12E+03
L1	-5.91E+03	6.70E+03	-5.83E+03	6.63E+03
L3	-6.23E+03	3.97E+03	-6.06E+03	3.95E+03
L4	-6.33E+03	1.63E+04	-5.87E+03	8.01E+03
NF	-1.09E+04	4.75E+03	-1.08E+04	4.66E+03
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–81. Time history of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–161. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	2.51E-04	5.83E-02	156	3.07E-04	29
A2	2.63E-04	6.05E-02	158	3.08E-04	31
FD	5.61E-06	7.69E-06	-70	7.01E-06	160
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.29E-04	2.69E-04	102	6.78E-04	-71

Table G–162. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-6.12E-02	6.11E-02	-6.04E-02	6.03E-02
A2	-6.35E-02	6.33E-02	-6.27E-02	6.25E-02
FD	-9.05E-05	1.00E-04	-1.51E-05	3.37E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-3.64E-03	3.02E-03	-2.03E-03	1.54E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.0
fptot_y (kN)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–82. Time history of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–163. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	7.55E-04	0.175	156	9.22E-04	29
A2	-42.1	97.1	124	144.	-5
FD	-1.13E-06	7.12E-06	-168	3.71E-06	-159
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.92E-04	3.62E-04	-140	1.40E-03	-109

Table G–164. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-0.184	0.184	-0.182	0.181
A2	-5.83E+03	1.80E+03	-776.	238.
FD	-1.39E-04	9.97E-05	-3.38E-05	3.79E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.38E-02	1.01E-02	-9.30E-03	4.57E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 0; Fn=0.0
fptot_y (kN)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–83. Time history of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–165. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.01E-03	0.234	156	1.23E-03	29
A2	10.1	21.6	71	25.0	45
FD	-1.19E-05	7.62E-06	-27	6.92E-06	61
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-5.14E-04	5.38E-04	79	1.53E-03	114

Table G–166. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered		Filtered	
	Minimum (kN)	Maximum (kN)	Minimum (kN)	Maximum (kN)
A1	-0.246	0.245	-0.243	0.242
A2	-0.255	1.91E+03	-22.0	255.
FD	-1.61E-04	1.86E-04	-6.75E-05	2.93E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-2.04E-02	1.96E-02	-4.41E-03	2.95E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 0; Fn=0.0
fptot_y (kN)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–84. Time history of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–167. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.51E-03	0.351	156	1.85E-03	29
A2	-2.45	4.53	-71	5.09	-42
FD	4.96E-06	6.08E-06	63	2.03E-05	111
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–168. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-0.368	0.368	-0.364	0.363
A2	-260.	0.381	-37.5	3.50
FD	-1.98E-04	2.10E-04	-6.80E-05	6.00E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 45; Fn=0.0
fptot_y (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–85. Time history of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–169. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} +$ $\cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-3.26	2.60E+03	70	1.80	-12
A2	-4.17	2.56E+03	68	169.	123
FD	-0.874	2.69E+03	62	41.1	169
L1	-201.	2.72E+03	73	111.	73
L3	-201.	2.70E+03	73	108.	99
L4	78.1	2.66E+03	73	233.	74
NF	—	—	—	—	—
NS	133.	2.42E+03	77	112.	128

Table G–170. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.59E+03	2.59E+03	-2.57E+03	2.57E+03
A2	-2.68E+03	2.74E+03	-2.64E+03	2.71E+03
FD	-2.72E+03	2.66E+03	-2.69E+03	2.63E+03
L1	-2.81E+03	2.62E+03	-2.80E+03	2.61E+03
L3	-2.82E+03	2.58E+03	-2.82E+03	2.57E+03
L4	-2.46E+03	3.03E+03	-2.37E+03	2.95E+03
NF	—	—	—	—
NS	-2.24E+03	2.60E+03	-2.21E+03	2.59E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–86. Time history of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–171. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-9.82	7.81E+03	70	5.42	-12
A2	10.0	8.00E+03	70	211.	136
FD	-7.60	8.18E+03	63	290.	161
L1	-1.81E+03	8.15E+03	73	1.00E+03	72
L3	-1.81E+03	7.86E+03	73	999.	89
L4	812.	8.05E+03	75	1.88E+03	66
NF	—	—	—	—	—
NS	1.13E+03	7.54E+03	75	1.13E+03	122

Table G–172. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-7.79E+03	7.79E+03	-7.72E+03	7.72E+03
A2	-7.80E+03	1.27E+04	-7.74E+03	7.77E+03
FD	-8.24E+03	7.97E+03	-8.17E+03	7.90E+03
L1	-9.03E+03	7.32E+03	-9.01E+03	7.27E+03
L3	-8.86E+03	6.89E+03	-8.84E+03	6.88E+03
L4	-6.15E+03	1.10E+04	-5.60E+03	1.06E+04
NF	—	—	—	—
NS	-6.34E+03	1.03E+04	-6.22E+03	9.46E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 45; Fn=0.0
fptot_y (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–87. Time history of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–173. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-13.1	1.04E+04	70	7.23	-12
A2	25.7	1.11E+04	71	100.	135
FD	-16.2	1.09E+04	64	396.	159
L1	-3.21E+03	1.09E+04	73	1.78E+03	72
L3	-3.22E+03	1.02E+04	73	1.77E+03	84
L4	1.72E+03	1.09E+04	77	2.86E+03	58
NF	—	—	—	—	—
NS	1.97E+03	1.08E+04	68	1.97E+03	101

Table G–174. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.04E+04	1.04E+04	-1.03E+04	1.03E+04
A2	-1.07E+04	1.10E+04	-1.06E+04	1.09E+04
FD	-1.09E+04	1.06E+04	-1.08E+04	1.06E+04
L1	-1.25E+04	9.39E+03	-1.25E+04	9.33E+03
L3	-1.20E+04	8.59E+03	-1.20E+04	8.59E+03
L4	-7.56E+03	1.55E+04	-6.62E+03	1.49E+04
NF	—	—	—	—
NS	-8.76E+03	1.49E+04	-8.67E+03	1.45E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–88. Time history of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–175. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-19.7	1.56E+04	70	10.8	-12
A2	465.	1.65E+04	74	1.02E+03	117
FD	-31.8	1.67E+04	66	580.	162
L1	-7.22E+03	1.63E+04	73	4.00E+03	72
L3	-7.22E+03	1.48E+04	73	3.94E+03	79
L4	3.57E+03	1.88E+04	76	5.41E+03	37
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–176. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.56E+04	1.56E+04	-1.55E+04	1.55E+04
A2	-1.78E+04	2.67E+04	-1.58E+04	1.72E+04
FD	-1.67E+04	1.63E+04	-1.65E+04	1.63E+04
L1	-2.04E+04	1.30E+04	-2.03E+04	1.29E+04
L3	-1.95E+04	1.14E+04	-1.94E+04	1.14E+04
L4	-1.40E+04	2.78E+04	-1.28E+04	2.63E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–89. Time history of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–177. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-5.68	6.74E+03	80	6.57	-4
A2	-8.22	6.75E+03	78	483.	-4
FD	-3.12	7.48E+03	75	660.	-15
L1	-383.	6.92E+03	81	529.	25
L3	-382.	6.90E+03	80	978.	9
L4	252.	6.72E+03	80	1.42E+03	-5
NF	—	—	—	—	—
NS	204.	6.09E+03	84	977.	-18

Table G–178. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-6.75E+03	6.73E+03	-6.64E+03	6.74E+03
A2	-7.41E+03	7.57E+03	-7.27E+03	7.43E+03
FD	-7.40E+03	7.73E+03	-7.33E+03	7.64E+03
L1	-6.99E+03	6.94E+03	-6.97E+03	6.92E+03
L3	-7.09E+03	7.16E+03	-7.07E+03	7.12E+03
L4	-6.81E+03	7.99E+03	-6.57E+03	7.57E+03
NF	—	—	—	—
NS	-6.22E+03	6.42E+03	-6.14E+03	6.33E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–90. Time history of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–179. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-17.1	2.03E+04	80	19.8	-4
A2	69.4	2.09E+04	78	6.45E+03	-18
FD	-22.2	2.30E+04	75	5.42E+03	-15
L1	-3.43E+03	2.08E+04	81	4.75E+03	25
L3	-3.42E+03	2.04E+04	80	8.44E+03	10
L4	1.81E+03	2.06E+04	81	1.16E+04	-7
NF	—	—	—	—	—
NS	1.71E+03	1.88E+04	80	8.93E+03	-20

Table G–180. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.03E+04	2.02E+04	-2.00E+04	2.03E+04
A2	-2.27E+04	2.37E+04	-2.22E+04	2.36E+04
FD	-2.39E+04	2.61E+04	-2.36E+04	2.56E+04
L1	-2.28E+04	2.13E+04	-2.27E+04	2.11E+04
L3	-2.57E+04	2.38E+04	-2.56E+04	2.36E+04
L4	-2.75E+04	3.08E+04	-2.69E+04	2.96E+04
NF	—	—	—	—
NS	-2.41E+04	2.58E+04	-2.32E+04	2.47E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.0
fptot_y (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–91. Time history of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–181. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-22.8	2.71E+04	80	26.4	-4
A2	5.36	2.94E+04	78	1.14E+04	-18
FD	-35.7	3.11E+04	75	9.47E+03	-15
L1	-6.10E+03	2.77E+04	81	8.43E+03	25
L3	-6.08E+03	2.68E+04	80	1.47E+04	10
L4	3.31E+03	2.86E+04	83	2.12E+04	-9
NF	—	—	—	—	—
NS	2.94E+03	2.49E+04	78	1.51E+04	-21

Table G–182. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.71E+04	2.70E+04	-2.67E+04	2.71E+04
A2	-3.44E+04	3.67E+04	-3.34E+04	3.56E+04
FD	-3.37E+04	3.70E+04	-3.31E+04	3.63E+04
L1	-3.26E+04	2.88E+04	-3.24E+04	2.86E+04
L3	-3.80E+04	3.33E+04	-3.77E+04	3.30E+04
L4	-4.54E+04	4.66E+04	-4.44E+04	4.49E+04
NF	—	—	—	—
NS	-3.51E+04	3.73E+04	-3.42E+04	3.65E+04

G–423

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.0
fptot_y (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–92. Time history of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–183. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-34.2	4.06E+04	80	39.6	-4
A2	68.1	4.67E+04	78	2.40E+04	-17
FD	-108.	4.83E+04	75	2.01E+04	-14
L1	-1.37E+04	4.15E+04	81	1.90E+04	25
L3	-1.36E+04	3.95E+04	80	3.08E+04	12
L4	5.63E+03	5.07E+04	82	4.83E+04	-10
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–184. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-4.06E+04	4.05E+04	-4.00E+04	4.06E+04
A2	-6.08E+04	6.42E+04	-5.94E+04	6.27E+04
FD	-5.68E+04	6.25E+04	-5.55E+04	6.11E+04
L1	-5.69E+04	4.46E+04	-5.66E+04	4.42E+04
L3	-6.78E+04	5.41E+04	-6.74E+04	5.35E+04
L4	-1.01E+05	8.98E+04	-9.87E+04	8.71E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.0
fptot_y (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–93. Time history of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–185. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-0.903	2.65E+03	89	3.99	23
A2	-7.35	2.57E+03	87	146.	-172
FD	-0.972	2.79E+03	87	42.2	159
L1	-181.	2.87E+03	89	93.7	74
L3	-181.	2.86E+03	89	107.	102
L4	103.	2.80E+03	90	174.	74
NF	—	—	—	—	—
NS	141.	2.45E+03	91	111.	-165

Table G–186. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.64E+03	2.67E+03	-2.60E+03	2.65E+03
A2	-2.83E+03	2.63E+03	-2.75E+03	2.59E+03
FD	-2.78E+03	2.80E+03	-2.75E+03	2.77E+03
L1	-2.96E+03	2.78E+03	-2.95E+03	2.77E+03
L3	-2.94E+03	2.78E+03	-2.93E+03	2.77E+03
L4	-2.63E+03	3.17E+03	-2.59E+03	3.12E+03
NF	—	—	—	—
NS	-2.34E+03	2.57E+03	-2.30E+03	2.54E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–94. Time history of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–187. Coefficients of the Fourier fit $a_0+a_1\sin\left(\omega t+\Phi_1\right)+a_2\sin\left(2\omega t+\Phi_2\right)+$ $\cdots$ of F_y^{ptot} for one period for $H/\lambda=1/20$, $\lambda/L=1$, $\beta=135°$, $F_n=0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-2.72	7.98E+03	89	12.0	23
A2	8.89	8.08E+03	84	213.	-171
FD	-1.26	8.53E+03	86	301.	164
L1	-1.61E+03	8.60E+03	89	832.	73
L3	-1.61E+03	8.36E+03	89	846.	94
L4	917.	8.83E+03	89	1.35E+03	72
NF	—	—	—	—	—
NS	1.18E+03	7.66E+03	88	993.	-168

Table G–188. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda=1/20$, $\lambda/L=1$, $\beta=135°$, $F_n=0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-7.95E+03	8.02E+03	-7.82E+03	7.97E+03
A2	-8.35E+03	7.95E+03	-7.85E+03	7.95E+03
FD	-8.48E+03	8.48E+03	-8.40E+03	8.39E+03
L1	-9.43E+03	7.81E+03	-9.41E+03	7.76E+03
L3	-9.08E+03	7.49E+03	-9.07E+03	7.45E+03
L4	-6.70E+03	1.16E+04	-6.41E+03	1.09E+04
NF	—	—	—	—
NS	-8.03E+03	8.90E+03	-7.25E+03	8.79E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–95. Time history of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–189. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-3.63	1.07E+04	89	16.0	23
A2	-134.	1.15E+04	84	158.	-110
FD	3.31	1.14E+04	86	429.	165
L1	-2.86E+03	1.15E+04	89	1.48E+03	73
L3	-2.86E+03	1.09E+04	88	1.46E+03	88
L4	1.82E+03	1.22E+04	89	1.92E+03	56
NF	—	—	—	—	—
NS	2.05E+03	1.09E+04	90	1.30E+03	-151

Table G–190. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.06E+04	1.07E+04	-1.04E+04	1.06E+04
A2	-1.86E+04	1.10E+04	-1.21E+04	1.10E+04
FD	-1.14E+04	1.14E+04	-1.13E+04	1.12E+04
L1	-1.30E+04	1.01E+04	-1.29E+04	1.00E+04
L3	-1.22E+04	9.41E+03	-1.22E+04	9.35E+03
L4	-9.39E+03	1.60E+04	-8.75E+03	1.55E+04
NF	—	—	—	—
NS	-1.02E+04	1.28E+04	-1.00E+04	1.27E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 135; Fn=0.0
fptot_y (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–96. Time history of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–191. Coefficients of the Fourier fit $a_0+a_1 \sin{(\omega t + \Phi_1)}+a_2 \sin{(2\omega t + \Phi_2)}+\cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-5.44	1.60E+04	89	24.0	23
A2	-69.1	1.78E+04	82	978.	166
FD	22.2	1.76E+04	84	674.	164
L1	-6.43E+03	1.72E+04	89	3.32E+03	73
L3	-6.43E+03	1.59E+04	88	3.28E+03	82
L4	3.83E+03	2.08E+04	88	4.52E+03	25
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–192. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.59E+04	1.61E+04	-1.57E+04	1.60E+04
A2	-1.83E+04	1.78E+04	-1.81E+04	1.78E+04
FD	-1.76E+04	1.76E+04	-1.74E+04	1.75E+04
L1	-2.07E+04	1.40E+04	-2.07E+04	1.39E+04
L3	-1.90E+04	1.26E+04	-1.90E+04	1.26E+04
L4	-2.02E+04	2.98E+04	-1.60E+04	2.85E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–97. Time history of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–193. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	2.90E-05	2.82E-03	-68	8.69E-05	158
A2	4.03E-05	1.95E-03	-142	8.91E-05	146
FD	-1.05E-05	1.30E-04	-97	2.39E-05	179
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-5.12E-05	3.59E-04	136	2.61E-04	4

Table G–194. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-3.08E-03	3.56E-03	-3.05E-03	2.60E-03
A2	-2.76E-03	2.45E-03	-2.71E-03	2.33E-03
FD	-1.08E-03	1.31E-03	-2.69E-04	2.27E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-2.35E-03	2.58E-03	-9.03E-04	8.32E-04

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–98. Time history of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–195. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.73E-05	8.49E-03	-68	2.61E-04	158
A2	113.	153.	89	199.	116
FD	-2.43E-05	4.28E-04	-89	8.71E-05	179
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-7.65E-05	6.93E-04	127	1.23E-03	-28

Table G–196. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-9.25E-03	1.07E-02	-9.16E-03	7.83E-03
A2	-8.45E-03	1.18E+04	-143.	1.58E+03
FD	-3.19E-03	3.79E-03	-7.94E-04	8.90E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.22E-02	1.01E-02	-4.09E-03	3.77E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 180; Fn=0.0
fptot_y (kN)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–99. Time history of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–197. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.17E-04	1.13E-02	-68	3.49E-04	158
A2	-31.4	70.1	-139	86.9	177
FD	-3.64E-05	5.83E-04	-86	1.38E-04	169
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-3.30E-04	1.51E-03	156	1.17E-03	-145

Table G–198. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.24E-02	1.43E-02	-1.22E-02	1.05E-02
A2	-6.75E+03	182.	-900.	76.9
FD	-4.24E-03	4.99E-03	-1.07E-03	1.33E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-7.08E-02	7.54E-02	-3.49E-03	4.84E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 180; Fn=0.0
fptot_y (kN)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–100. Time history of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–199. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.75E-04	1.70E-02	-68	5.24E-04	158
A2	9.49	37.7	-78	106.	29
FD	-4.74E-05	8.44E-04	-83	2.71E-04	170
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–200. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.85E-02	2.15E-02	-1.84E-02	1.57E-02
A2	-4.88E+03	4.85E+03	-657.	660.
FD	-6.30E-03	7.61E-03	-1.60E-03	2.00E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–101. Time history of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–201. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-6.35E-05	5.84E-02	-24	5.92E-04	-35
A2	-5.39E-05	5.64E-02	-26	5.85E-04	-34
FD	-2.30E-07	2.08E-06	-77	5.41E-06	44
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-8.62E-05	3.49E-04	-2	3.88E-04	-165

Table G–202. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-6.20E-02	6.12E-02	-5.86E-02	5.82E-02
A2	-5.99E-02	5.90E-02	-5.65E-02	5.60E-02
FD	-1.35E-04	1.23E-04	-3.67E-05	3.30E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-4.76E-03	4.96E-03	-3.73E-03	2.63E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.3
fptot_y (kN)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–102. Time history of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–203. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period $= 40.02$ sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.91E-04	0.176	-24	1.78E-03	-35
A2	2.05	15.3	95	36.9	14
FD	4.36E-06	7.03E-06	143	3.73E-06	164
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-4.02E-04	2.39E-04	-108	2.31E-03	-125

Table G–204. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period $= 40.02$ sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-0.186	0.184	-0.176	0.175
A2	-5.82E+03	1.64E+03	-470.	426.
FD	-1.69E-04	1.41E-04	-4.56E-05	4.80E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-4.99E-02	4.84E-02	-6.55E-03	3.87E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–103. Time history of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–205. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-2.55E-04	0.234	-24	2.38E-03	-35
A2	11.6	2.26	3	17.0	64
FD	6.54E-07	6.19E-07	-156	8.66E-06	-42
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.40E-04	1.16E-03	-62	1.82E-03	31

Table G–206. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered		Filtered	
	Minimum (kN)	Maximum (kN)	Minimum (kN)	Maximum (kN)
A1	-0.249	0.246	-0.235	0.234
A2	-691.	1.93E+03	-22.0	257.
FD	-2.37E-04	2.13E-04	-5.65E-05	6.26E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.30E-02	1.33E-02	-9.23E-03	7.69E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 0; Fn=0.3
fptot_y (kN)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–104. Time history of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–207. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-3.82E-04	0.352	-24	3.56E-03	-35
A2	66.9	110.	136	85.4	-177
FD	-1.39E-06	6.98E-06	-135	7.47E-06	83
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–208. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-0.373	0.369	-0.353	0.350
A2	-271.	1.44E+04	-193.	1.93E+03
FD	-2.27E-04	2.08E-04	-6.53E-05	5.79E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–105. Time history of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–209. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.890	1.91E+03	84	1.08	-128
A2	-3.44	1.85E+03	84	174.	138
FD	0.142	2.15E+03	90	41.4	-163
L1	-195.	2.15E+03	87	40.7	160
L3	-195.	2.14E+03	87	87.2	178
L4	25.8	2.13E+03	87	84.1	-158
NF	—	—	—	—	—
NS	78.4	2.68E+03	85	107.	-161

Table G–210. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.92E+03	1.93E+03	-1.92E+03	1.93E+03
A2	-1.94E+03	2.10E+03	-1.93E+03	2.09E+03
FD	-2.16E+03	2.14E+03	-2.16E+03	2.15E+03
L1	-2.34E+03	1.97E+03	-2.34E+03	1.97E+03
L3	-2.35E+03	1.95E+03	-2.35E+03	1.95E+03
L4	-2.23E+03	2.21E+03	-2.15E+03	2.19E+03
NF	—	—	—	—
NS	-2.66E+03	2.75E+03	-2.64E+03	2.71E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 45; Fn=0.3
fptot_y (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–106. Time history of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–211. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	2.68	5.74E+03	84	3.24	-128
A2	39.0	5.93E+03	85	196.	157
FD	-0.545	6.60E+03	91	297.	-170
L1	-1.76E+03	6.46E+03	87	364.	160
L3	-1.76E+03	6.20E+03	87	639.	172
L4	556.	6.12E+03	90	567.	179
NF	—	—	—	—	—
NS	699.	8.77E+03	84	871.	174

Table G–212. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-5.78E+03	5.80E+03	-5.76E+03	5.80E+03
A2	-5.74E+03	1.05E+04	-5.73E+03	6.35E+03
FD	-6.56E+03	6.58E+03	-6.55E+03	6.57E+03
L1	-8.18E+03	4.82E+03	-8.18E+03	4.83E+03
L3	-7.92E+03	4.56E+03	-7.91E+03	4.55E+03
L4	-5.94E+03	7.06E+03	-5.46E+03	6.97E+03
NF	—	—	—	—
NS	-8.43E+03	1.02E+04	-8.31E+03	9.77E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–107. Time history of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–213. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	3.57	7.66E+03	84	4.32	-128
A2	43.4	8.36E+03	86	95.0	168
FD	-0.797	8.86E+03	92	420.	-170
L1	-3.13E+03	8.62E+03	87	646.	160
L3	-3.13E+03	8.04E+03	87	1.00E+03	169
L4	1.29E+03	7.83E+03	94	825.	-179
NF	—	—	—	—	—
NS	1.17E+03	1.22E+04	84	1.61E+03	172

Table G–214. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-7.71E+03	7.74E+03	-7.69E+03	7.74E+03
A2	-8.09E+03	9.58E+03	-8.08E+03	8.41E+03
FD	-8.81E+03	8.86E+03	-8.79E+03	8.84E+03
L1	-1.17E+04	5.72E+03	-1.17E+04	5.71E+03
L3	-1.11E+04	5.19E+03	-1.11E+04	5.18E+03
L4	-7.75E+03	1.00E+04	-6.42E+03	9.85E+03
NF	—	—	—	—
NS	-1.18E+04	1.48E+04	-1.16E+04	1.40E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 45; Fn=0.3
fptot_y (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–108. Time history of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–215. Coefficients of the Fourier fit $a_0 + a_1 \sin (\omega t + \Phi_1) + a_2 \sin (2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	5.36	1.15E+04	84	6.49	-128
A2	379.	1.30E+04	89	1.07E+03	157
FD	2.61	1.37E+04	94	662.	-168
L1	-7.04E+03	1.29E+04	87	1.45E+03	160
L3	-7.04E+03	1.15E+04	88	1.91E+03	167
L4	3.02E+03	1.09E+04	95	1.84E+03	159
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–216. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.16E+04	1.16E+04	-1.15E+04	1.16E+04
A2	-1.34E+04	3.10E+04	-1.38E+04	1.45E+04
FD	-1.37E+04	1.39E+04	-1.37E+04	1.38E+04
L1	-2.00E+04	6.49E+03	-1.99E+04	6.47E+03
L3	-1.85E+04	5.31E+03	-1.85E+04	5.30E+03
L4	-9.96E+03	2.93E+04	-7.46E+03	1.75E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–109. Time history of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–217. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-3.80	6.44E+03	75	10.4	10
A2	-6.35	6.47E+03	73	486.	-3
FD	-3.12	7.48E+03	75	660.	-15
L1	-214.	6.37E+03	78	411.	4
L3	-214.	6.34E+03	77	896.	-2
L4	202.	6.31E+03	78	1.09E+03	-14
NF	—	—	—	—	—
NS	79.3	6.12E+03	89	998.	-10

Table G–218. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-6.45E+03	6.50E+03	-6.36E+03	6.43E+03
A2	-7.08E+03	7.33E+03	-6.90E+03	7.17E+03
FD	-7.40E+03	7.73E+03	-7.33E+03	7.64E+03
L1	-6.43E+03	6.39E+03	-6.41E+03	6.36E+03
L3	-6.46E+03	6.66E+03	-6.43E+03	6.62E+03
L4	-6.46E+03	7.21E+03	-6.26E+03	6.95E+03
NF	—	—	—	—
NS	-6.49E+03	6.26E+03	-6.37E+03	6.21E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.3
fptot_y (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–110. Time history of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–219. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-11.4	1.94E+04	75	31.2	10
A2	75.1	2.01E+04	73	6.46E+03	-18
FD	-22.2	2.30E+04	75	5.42E+03	-15
L1	-1.92E+03	1.91E+04	78	3.68E+03	4
L3	-1.91E+03	1.87E+04	77	7.68E+03	-2
L4	1.92E+03	1.90E+04	76	9.87E+03	-19
NF	—	—	—	—	—
NS	464.	1.87E+04	87	9.10E+03	-12

Table G–220. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.94E+04	1.95E+04	-1.91E+04	1.93E+04
A2	-2.11E+04	2.42E+04	-2.04E+04	2.37E+04
FD	-2.39E+04	2.61E+04	-2.36E+04	2.56E+04
L1	-2.06E+04	1.97E+04	-2.05E+04	1.96E+04
L3	-2.30E+04	2.27E+04	-2.28E+04	2.25E+04
L4	-2.41E+04	2.69E+04	-2.38E+04	2.66E+04
NF	—	—	—	—
NS	-2.68E+04	2.38E+04	-2.51E+04	2.31E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–111. Time history of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–221. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-15.2	2.59E+04	75	41.7	10
A2	17.3	2.83E+04	73	1.14E+04	-18
FD	-35.7	3.11E+04	75	9.47E+03	-15
L1	-3.41E+03	2.55E+04	78	6.54E+03	4
L3	-3.38E+03	2.46E+04	77	1.33E+04	-2
L4	3.65E+03	2.55E+04	75	1.70E+04	-20
NF	—	—	—	—	—
NS	265.	2.47E+04	89	1.54E+04	-10

Table G–222. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.59E+04	2.61E+04	-2.55E+04	2.58E+04
A2	-3.18E+04	3.72E+04	-3.10E+04	3.59E+04
FD	-3.37E+04	3.70E+04	-3.31E+04	3.63E+04
L1	-2.88E+04	2.68E+04	-2.87E+04	2.67E+04
L3	-3.35E+04	3.20E+04	-3.33E+04	3.17E+04
L4	-3.63E+04	4.04E+04	-3.56E+04	4.00E+04
NF	—	—	—	—
NS	-3.98E+04	3.27E+04	-3.89E+04	3.23E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–112. Time history of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–223. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-22.9	3.88E+04	75	62.5	10
A2	79.4	4.50E+04	74	2.40E+04	-17
FD	-108.	4.83E+04	75	2.01E+04	-14
L1	-7.66E+03	3.82E+04	78	1.47E+04	4
L3	-7.58E+03	3.61E+04	77	2.76E+04	-1
L4	8.23E+03	4.09E+04	70	3.49E+04	-20
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–224. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-3.89E+04	3.91E+04	-3.83E+04	3.87E+04
A2	-5.71E+04	6.48E+04	-5.57E+04	6.32E+04
FD	-5.68E+04	6.24E+04	-5.55E+04	6.11E+04
L1	-4.86E+04	4.20E+04	-4.83E+04	4.17E+04
L3	-5.89E+04	5.26E+04	-5.84E+04	5.20E+04
L4	-6.57E+04	7.71E+04	-6.45E+04	7.56E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.3
fptot_y (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–113. Time history of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–225. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-0.336	3.21E+03	81	14.0	31
A2	-6.64	3.15E+03	78	137.	-176
FD	0.207	3.36E+03	88	40.6	178
L1	-124.	2.94E+03	83	2.60	-43
L3	-124.	2.93E+03	82	47.1	165
L4	131.	2.77E+03	85	166.	-168
NF	—	—	—	—	—
NS	73.9	1.82E+03	86	98.1	-145

Table G–226. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-3.20E+03	3.23E+03	-3.13E+03	3.25E+03
A2	-3.41E+03	3.19E+03	-3.30E+03	3.19E+03
FD	-3.37E+03	3.36E+03	-3.29E+03	3.35E+03
L1	-3.07E+03	2.82E+03	-3.04E+03	2.84E+03
L3	-3.05E+03	2.80E+03	-3.03E+03	2.82E+03
L4	-2.70E+03	2.98E+03	-2.65E+03	2.84E+03
NF	—	—	—	—
NS	-1.88E+03	1.81E+03	-1.76E+03	1.80E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–114. Time history of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–227. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.01	9.65E+03	81	42.2	31
A2	6.09	9.88E+03	76	212.	-163
FD	4.94	1.03E+04	87	288.	-175
L1	-1.12E+03	8.83E+03	83	22.1	-42
L3	-1.12E+03	8.58E+03	82	258.	174
L4	1.43E+03	8.31E+03	81	1.34E+03	168
NF	—	—	—	—	—
NS	465.	4.48E+03	83	1.11E+03	-130

Table G–228. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-9.63E+03	9.72E+03	-9.40E+03	9.77E+03
A2	-1.03E+04	9.74E+03	-9.74E+03	9.75E+03
FD	-1.03E+04	1.02E+04	-1.01E+04	1.02E+04
L1	-9.96E+03	7.70E+03	-9.88E+03	7.78E+03
L3	-9.72E+03	7.34E+03	-9.64E+03	7.41E+03
L4	-7.52E+03	1.15E+04	-7.36E+03	9.83E+03
NF	—	—	—	—
NS	-6.26E+03	4.37E+03	-5.10E+03	4.30E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–115. Time history of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–229. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$,
$F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.35	1.29E+04	81	56.3	31
A2	-18.0	1.37E+04	76	84.0	-83
FD	10.5	1.38E+04	87	398.	-174
L1	-1.99E+03	1.18E+04	83	38.9	-42
L3	-1.99E+03	1.12E+04	81	322.	175
L4	2.85E+03	1.11E+04	78	2.07E+03	168
NF	—	—	—	—	—
NS	836.	6.64E+03	80	2.05E+03	-112

Table G–230. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/15$,
$\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.29E+04	1.30E+04	-1.25E+04	1.30E+04
A2	-1.37E+04	1.35E+04	-1.34E+04	1.35E+04
FD	-1.39E+04	1.37E+04	-1.35E+04	1.37E+04
L1	-1.38E+04	9.77E+03	-1.37E+04	9.87E+03
L3	-1.32E+04	9.09E+03	-1.32E+04	9.18E+03
L4	-9.69E+03	1.45E+04	-9.47E+03	1.39E+04
NF	—	—	—	—
NS	-7.91E+03	7.67E+03	-7.66E+03	5.90E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 135; Fn=0.3
fptot_y (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–116. Time history of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–231. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-2.02	1.93E+04	81	84.5	31
A2	-46.3	2.14E+04	75	968.	158
FD	21.5	2.11E+04	86	590.	-178
L1	-4.47E+03	1.77E+04	83	86.8	-42
L3	-4.47E+03	1.64E+04	80	387.	174
L4	6.80E+03	1.82E+04	70	4.09E+03	177
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–232. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.93E+04	1.95E+04	-1.88E+04	1.96E+04
A2	-2.22E+04	2.14E+04	-2.14E+04	2.14E+04
FD	-2.14E+04	2.11E+04	-2.09E+04	2.11E+04
L1	-2.22E+04	1.32E+04	-2.20E+04	1.33E+04
L3	-2.09E+04	1.18E+04	-2.08E+04	1.19E+04
L4	-1.96E+04	2.54E+04	-1.50E+04	2.48E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 180; Fn=0.3
fptot_y (kN)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–117. Time history of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–233. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.95E-04	5.95E-02	-150	3.04E-04	119
A2	2.03E-04	6.09E-02	-152	3.16E-04	116
FD	1.65E-05	8.61E-04	23	3.15E-04	30
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	2.28E-05	3.64E-05	-19	1.79E-04	-86

Table G–234. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-5.97E-02	5.95E-02	-5.76E-02	5.76E-02
A2	-6.12E-02	6.08E-02	-5.90E-02	5.89E-02
FD	-1.52E-03	1.71E-03	-9.05E-04	1.43E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.63E-02	1.54E-02	-6.98E-04	1.69E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3 and LAMP-4.

Figure G–118. Time history of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–235. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	5.85E-04	0.179	-150	9.14E-04	119
A2	10.5	23.2	14	29.8	-60
FD	-4.09E-05	2.24E-03	27	1.24E-03	28
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	-3.04E-12	4.34E-12	175	6.22E-12	12
NS	-1.98E-04	6.66E-04	156	7.81E-05	1

Table G–236. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-0.180	0.179	-0.173	0.173
A2	-0.184	1.34E+03	-15.5	178.
FD	-4.40E-03	4.90E-03	-2.66E-03	4.13E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	-2.42E-11	1.41E-11	-1.51E-11	4.27E-12
NS	-1.43E-02	1.36E-02	-4.77E-03	2.20E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3 and LAMP-4.

Figure G–119. Time history of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–237. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	7.81E-04	0.239	-150	1.22E-03	119
A2	2.99	5.38	109	5.55	133
FD	-3.46E-05	2.96E-03	28	1.65E-03	26
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	-3.26E-12	9.15E-12	-55	2.64E-12	83
NS	4.07E-04	7.85E-04	11	1.17E-03	-132

Table G–238. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-0.240	0.239	-0.231	0.231
A2	-0.247	157.	-2.00	20.9
FD	-5.96E-03	6.70E-03	-3.47E-03	5.61E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	-2.15E-11	1.50E-11	-1.79E-11	8.05E-12
NS	-3.71E-02	3.76E-02	-1.55E-03	7.86E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 180; Fn=0.3
fptot_y (kN)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NSHIPMO.

Figure G–120. Time history of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–239. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.17E-03	0.358	-150	1.83E-03	119
A2	-3.61	8.04	64	7.90	-163
FD	1.76E-04	4.37E-03	25	2.73E-03	38
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	9.98E-12	1.35E-11	-168	5.24E-12	141
NS	—	—	—	—	—

Table G–240. Minimum and maximum of of F_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-0.359	0.358	-0.347	0.347
A2	-251.	45.9	-33.1	8.34
FD	-8.91E-03	1.11E-02	-5.77E-03	8.33E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	-5.13E-11	6.81E-11	-5.13E-11	4.91E-11
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 0; Fn=0.0
fptot_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–121. Time history of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–241. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	4.24E+03	73	5.59	32
A2	8.56E+04	4.33E+03	84	150.	-3
FD	8.56E+04	3.61E+03	48	235.	-148
L1	8.53E+04	7.47E+03	75	64.4	-12
L3	8.49E+04	7.50E+03	71	240.	-110
L4	8.48E+04	7.55E+03	71	163.	-54
NF	—	—	—	—	—
NS	8.40E+04	4.29E+03	42	52.9	94

Table G–242. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.16E+04	9.03E+04	8.17E+04	9.01E+04
A2	8.10E+04	9.03E+04	8.11E+04	9.02E+04
FD	8.18E+04	8.89E+04	8.19E+04	8.89E+04
L1	7.78E+04	9.28E+04	7.78E+04	9.27E+04
L3	7.72E+04	9.22E+04	7.72E+04	9.22E+04
L4	7.72E+04	9.26E+04	7.73E+04	9.23E+04
NF	—	—	—	—
NS	7.96E+04	8.82E+04	7.97E+04	8.82E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–122. Time history of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–243. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.27E+04	73	16.8	32
A2	8.76E+04	1.33E+04	62	1.57E+03	-179
FD	8.69E+04	1.17E+04	34	1.94E+03	-176
L1	8.30E+04	2.24E+04	75	590.	-16
L3	8.09E+04	2.16E+04	64	1.26E+03	-146
L4	8.02E+04	2.19E+04	59	835.	-119
NF	—	—	—	—	—
NS	7.84E+04	1.33E+04	39	436.	-150

Table G–244. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	7.29E+04	9.90E+04	7.32E+04	9.86E+04
A2	7.22E+04	1.00E+05	7.25E+04	1.00E+05
FD	7.35E+04	9.71E+04	7.36E+04	9.70E+04
L1	6.07E+04	1.06E+05	6.08E+04	1.05E+05
L3	5.70E+04	1.02E+05	5.72E+04	1.01E+05
L4	5.64E+04	1.03E+05	5.75E+04	1.02E+05
NF	—	—	—	—
NS	6.46E+04	9.12E+04	6.52E+04	9.09E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–123. Time history of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–245. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.58E+04	1.70E+04	73	22.5	32
A2	8.96E+04	1.74E+04	54	3.21E+03	175
FD	8.80E+04	1.57E+04	28	2.78E+03	163
L1	8.10E+04	2.99E+04	75	1.05E+03	-16
L3	7.83E+04	2.76E+04	62	1.22E+03	-173
L4	7.67E+04	2.84E+04	49	858.	-147
NF	—	—	—	—	—
NS	7.21E+04	2.04E+04	28	881.	153

Table G–246. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	6.85E+04	1.03E+05	6.89E+04	1.03E+05
A2	6.78E+04	1.05E+05	6.85E+04	1.05E+05
FD	6.93E+04	1.01E+05	6.96E+04	1.01E+05
L1	5.13E+04	1.11E+05	5.14E+04	1.11E+05
L3	4.85E+04	1.05E+05	4.87E+04	1.05E+05
L4	4.76E+04	1.06E+05	4.83E+04	1.05E+05
NF	—	—	—	—
NS	5.01E+04	9.18E+04	5.15E+04	9.13E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–124. Time history of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–247. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.58E+04	2.55E+04	73	33.7	32
A2	9.17E+04	2.08E+04	44	5.78E+03	64
FD	9.58E+04	1.93E+04	30	3.74E+03	141
L1	7.53E+04	4.48E+04	75	2.37E+03	-17
L3	7.57E+04	3.73E+04	68	505.	86
L4	7.46E+04	3.34E+04	35	1.29E+03	-10
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–248. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	5.98E+04	1.12E+05	6.05E+04	1.11E+05
A2	5.93E+04	1.17E+05	7.04E+04	1.17E+05
FD	7.26E+04	1.12E+05	7.29E+04	1.12E+05
L1	3.07E+04	1.21E+05	3.09E+04	1.21E+05
L3	3.79E+04	1.14E+05	3.80E+04	1.14E+05
L4	3.90E+04	1.12E+05	4.27E+04	1.10E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–125. Time history of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–249. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.01E+04	44	17.8	21
A2	8.56E+04	9.07E+03	43	514.	50
FD	8.56E+04	9.32E+03	32	275.	121
L1	8.50E+04	1.42E+04	55	97.1	17
L3	8.47E+04	1.41E+04	54	236.	113
L4	8.46E+04	1.42E+04	52	289.	-172
NF	—	—	—	—	—
NS	8.39E+04	9.11E+03	31	6.17	-130

Table G–250. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	7.57E+04	9.61E+04	7.58E+04	9.60E+04
A2	7.64E+04	9.52E+04	7.65E+04	9.51E+04
FD	7.60E+04	9.47E+04	7.61E+04	9.47E+04
L1	7.09E+04	9.94E+04	7.10E+04	9.93E+04
L3	7.05E+04	9.88E+04	7.05E+04	9.87E+04
L4	7.00E+04	9.87E+04	7.01E+04	9.85E+04
NF	—	—	—	—
NS	7.48E+04	9.30E+04	7.49E+04	9.29E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–126. Time history of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–251. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.58E+04	3.05E+04	44	53.5	21
A2	8.76E+04	2.74E+04	40	1.53E+03	87
FD	8.69E+04	2.73E+04	27	2.31E+03	101
L1	8.09E+04	4.27E+04	55	877.	14
L3	7.88E+04	3.94E+04	52	2.24E+03	85
L4	7.84E+04	4.08E+04	45	2.15E+03	155
NF	—	—	—	—	—
NS	7.79E+04	2.67E+04	30	682.	-175

Table G–252. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	5.53E+04	1.17E+05	5.56E+04	1.16E+05
A2	5.90E+04	1.15E+05	5.96E+04	1.15E+05
FD	5.67E+04	1.13E+05	5.73E+04	1.13E+05
L1	3.91E+04	1.25E+05	3.93E+04	1.24E+05
L3	3.91E+04	1.19E+05	3.93E+04	1.19E+05
L4	3.28E+04	1.18E+05	3.40E+04	1.17E+05
NF	—	—	—	—
NS	4.89E+04	1.05E+05	5.08E+04	1.04E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 45; Fn=0.0
fptot_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–127. Time history of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–253. Coefficients of the Fourier fit $a_0 + a_1 \sin\left(\omega t + \Phi_1\right) + a_2 \sin\left(2\omega t + \Phi_2\right) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.58E+04	4.07E+04	44	71.5	21
A2	8.95E+04	3.59E+04	38	2.48E+03	100
FD	8.79E+04	3.54E+04	25	3.84E+03	89
L1	7.74E+04	5.69E+04	55	1.56E+03	14
L3	7.46E+04	5.00E+04	52	3.80E+03	72
L4	7.41E+04	5.31E+04	40	2.73E+03	130
NF	—	—	—	—	—
NS	7.14E+04	3.59E+04	25	1.02E+03	169

Table G–254. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	4.50E+04	1.27E+05	4.55E+04	1.26E+05
A2	5.09E+04	1.25E+05	5.21E+04	1.24E+05
FD	4.80E+04	1.22E+05	4.89E+04	1.22E+05
L1	2.20E+04	1.36E+05	2.22E+04	1.36E+05
L3	2.58E+04	1.27E+05	2.60E+04	1.27E+05
L4	1.43E+04	1.26E+05	1.63E+04	1.25E+05
NF	—	—	—	—
NS	2.90E+04	1.07E+05	3.21E+04	1.07E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–128. Time history of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–255. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.57E+04	6.11E+04	44	107.	21
A2	9.31E+04	4.40E+04	41	2.89E+03	60
FD	9.57E+04	4.40E+04	29	4.17E+03	88
L1	6.71E+04	8.54E+04	55	3.51E+03	13
L3	6.74E+04	6.62E+04	60	4.98E+03	51
L4	7.07E+04	6.60E+04	35	2.03E+03	40
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–256. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	2.46E+04	1.47E+05	2.52E+04	1.47E+05
A2	2.14E+04	1.41E+05	5.00E+04	1.40E+05
FD	4.79E+04	1.39E+05	4.87E+04	1.38E+05
L1	-1.48E+04	1.56E+05	-1.45E+04	1.56E+05
L3	7.19E+03	1.38E+05	7.29E+03	1.37E+05
L4	1.26E+03	1.38E+05	5.25E+03	1.35E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–129. Time history of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–257. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	2.02E+04	23	39.0	14
A2	8.56E+04	1.84E+04	20	162.	54
FD	8.56E+04	1.93E+04	16	264.	-108
L1	8.47E+04	2.40E+04	37	595.	59
L3	8.43E+04	2.36E+04	38	883.	65
L4	8.43E+04	2.38E+04	36	676.	108
NF	—	—	—	—	—
NS	8.38E+04	1.69E+04	23	127.	-80

Table G–258. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	6.56E+04	1.06E+05	6.58E+04	1.06E+05
A2	6.70E+04	1.04E+05	6.72E+04	1.04E+05
FD	6.65E+04	1.05E+05	6.67E+04	1.05E+05
L1	6.08E+04	1.09E+05	6.09E+04	1.09E+05
L3	6.08E+04	1.08E+05	6.08E+04	1.08E+05
L4	6.02E+04	1.07E+05	6.04E+04	1.07E+05
NF	—	—	—	—
NS	6.70E+04	1.01E+05	6.72E+04	1.01E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.0
fptot_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–130. Time history of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–259. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of $F_{\hat{z}}^{\text{ptot}}$ for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$,
$F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.58E+04	6.08E+04	23	117.	14
A2	8.77E+04	5.17E+04	22	2.33E+03	-102
FD	8.69E+04	5.50E+04	18	984.	-106
L1	7.79E+04	7.21E+04	37	5.37E+03	60
L3	7.58E+04	6.65E+04	42	7.33E+03	65
L4	7.62E+04	6.82E+04	35	4.86E+03	102
NF	—	—	—	—	—
NS	7.73E+04	4.76E+04	23	1.36E+03	-57

Table G–260. Minimum and maximum of of $F_{\hat{z}}^{\text{ptot}}$ for one period for $H/\lambda = 1/20$,
$\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	2.49E+04	1.47E+05	2.56E+04	1.46E+05
A2	3.65E+04	1.40E+05	3.72E+04	1.40E+05
FD	3.27E+04	1.42E+05	3.32E+04	1.42E+05
L1	6.35E+03	1.52E+05	6.61E+03	1.52E+05
L3	9.78E+03	1.47E+05	1.00E+04	1.47E+05
L4	7.00E+03	1.41E+05	7.99E+03	1.40E+05
NF	—	—	—	—
NS	3.19E+04	1.27E+05	3.24E+04	1.26E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–131. Time history of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–261. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of $F_{\hat{z}}^{\text{ptot}}$ for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.58E+04	8.12E+04	23	157.	14
A2	8.96E+04	6.71E+04	23	3.78E+03	-102
FD	8.81E+04	7.11E+04	19	1.93E+03	-109
L1	7.19E+04	9.61E+04	37	9.54E+03	60
L3	6.92E+04	8.52E+04	44	1.20E+04	63
L4	7.15E+04	8.93E+04	34	7.40E+03	96
NF	—	—	—	—	—
NS	7.08E+04	5.85E+04	24	1.77E+03	-56

Table G–262. Minimum and maximum of of $F_{\hat{z}}^{\text{ptot}}$ for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	4.52E+03	1.67E+05	5.34E+03	1.66E+05
A2	2.35E+04	1.59E+05	2.41E+04	1.58E+05
FD	1.75E+04	1.60E+05	1.83E+04	1.59E+05
L1	-2.37E+04	1.72E+05	-2.34E+04	1.71E+05
L3	-1.53E+04	1.64E+05	-1.50E+04	1.63E+05
L4	-1.71E+04	1.55E+05	-1.59E+04	1.54E+05
NF	—	—	—	—
NS	1.51E+04	1.31E+05	1.56E+04	1.31E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–132. Time history of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–263. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.57E+04	1.22E+05	23	235.	14
A2	9.39E+04	8.59E+04	30	6.12E+03	-95
FD	9.64E+04	9.16E+04	24	1.08E+04	-111
L1	5.49E+04	1.44E+05	37	2.15E+04	60
L3	5.54E+04	1.15E+05	53	2.05E+04	56
L4	7.06E+04	1.10E+05	33	9.10E+03	-22
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–264. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-3.62E+04	2.08E+05	-3.49E+04	2.07E+05
A2	-824.	1.89E+05	1.75E+03	1.86E+05
FD	-3.19E+03	1.93E+05	-286.	1.92E+05
L1	-9.03E+04	2.09E+05	-8.97E+04	2.08E+05
L3	-5.99E+04	1.95E+05	-5.90E+04	1.94E+05
L4	-4.65E+04	1.82E+05	-4.48E+04	1.79E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–133. Time history of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–265. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.02E+04	14	24.7	10
A2	8.56E+04	9.05E+03	14	550.	89
FD	8.56E+04	1.09E+04	4	261.	30
L1	8.50E+04	1.22E+04	38	108.	23
L3	8.46E+04	1.27E+04	39	355.	25
L4	8.45E+04	1.24E+04	36	241.	168
NF	—	—	—	—	—
NS	8.39E+04	1.03E+04	16	30.0	-177

Table G–266. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	7.57E+04	9.61E+04	7.58E+04	9.61E+04
A2	7.64E+04	9.40E+04	7.65E+04	9.39E+04
FD	7.47E+04	9.63E+04	7.48E+04	9.62E+04
L1	7.29E+04	9.72E+04	7.29E+04	9.72E+04
L3	7.22E+04	9.76E+04	7.22E+04	9.76E+04
L4	7.18E+04	9.67E+04	7.19E+04	9.66E+04
NF	—	—	—	—
NS	7.35E+04	9.43E+04	7.36E+04	9.42E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–134. Time history of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–267. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	3.07E+04	14	74.3	10
A2	8.77E+04	2.87E+04	14	1.54E+03	55
FD	8.70E+04	3.37E+04	7	2.14E+03	48
L1	8.05E+04	3.65E+04	38	885.	23
L3	7.84E+04	3.97E+04	43	2.82E+03	43
L4	7.68E+04	3.75E+04	32	1.41E+03	156
NF	—	—	—	—	—
NS	7.79E+04	3.03E+04	16	571.	-171

Table G–268. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	5.51E+04	1.17E+05	5.55E+04	1.17E+05
A2	5.87E+04	1.16E+05	5.89E+04	1.16E+05
FD	5.25E+04	1.19E+05	5.28E+04	1.19E+05
L1	4.47E+04	1.18E+05	4.48E+04	1.18E+05
L3	4.05E+04	1.20E+05	4.06E+04	1.20E+05
L4	3.75E+04	1.13E+05	3.79E+04	1.13E+05
NF	—	—	—	—
NS	4.61E+04	1.11E+05	4.71E+04	1.09E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–135. Time history of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–269. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.58E+04	4.10E+04	14	99.1	10
A2	8.95E+04	3.91E+04	15	2.57E+03	48
FD	8.80E+04	4.52E+04	9	3.62E+03	58
L1	7.65E+04	4.87E+04	38	1.55E+03	23
L3	7.38E+04	5.31E+04	45	4.50E+03	51
L4	7.14E+04	5.13E+04	28	2.10E+03	116
NF	—	—	—	—	—
NS	7.15E+04	4.03E+04	21	586.	-157

Table G–270. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

| | Unfiltered | | Filtered | |
| | Minimum | Maximum | Minimum | Maximum |
Code	(kN)	(kN)	(kN)	(kN)
A1	4.48E+04	1.27E+05	4.52E+04	1.27E+05
A2	4.96E+04	1.28E+05	5.00E+04	1.28E+05
FD	4.07E+04	1.31E+05	4.11E+04	1.31E+05
L1	2.90E+04	1.26E+05	2.92E+04	1.26E+05
L3	2.36E+04	1.29E+05	2.37E+04	1.29E+05
L4	1.76E+04	1.21E+05	1.82E+04	1.20E+05
NF	—	—	—	—
NS	2.95E+04	1.16E+05	3.00E+04	1.13E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 135; Fn=0.0
fptot_z (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–136. Time history of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–271. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.58E+04	6.15E+04	14	149.	10
A2	9.34E+04	5.40E+04	26	3.97E+03	84
FD	9.57E+04	5.99E+04	14	4.04E+03	56
L1	6.52E+04	7.30E+04	38	3.45E+03	23
L3	6.56E+04	7.49E+04	54	6.21E+03	43
L4	6.83E+04	6.38E+04	23	4.89E+03	81
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–272. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	2.43E+04	1.47E+05	2.49E+04	1.48E+05
A2	3.57E+04	1.46E+05	3.85E+04	1.45E+05
FD	3.34E+04	1.54E+05	3.41E+04	1.53E+05
L1	-5.14E+03	1.41E+05	-4.91E+03	1.41E+05
L3	-2.82E+03	1.45E+05	-2.66E+03	1.45E+05
L4	-4.88E+03	1.33E+05	-2.85E+03	1.30E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 180; Fn=0.0
fptot_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–137. Time history of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–273. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	3.79E+03	22	14.1	11
A2	8.56E+04	2.80E+03	22	165.	-178
FD	8.56E+04	4.59E+03	-5	236.	-59
L1	8.52E+04	5.82E+03	59	31.2	10
L3	8.49E+04	6.27E+03	54	265.	-62
L4	8.47E+04	5.82E+03	54	127.	164
NF	—	—	—	—	—
NS	8.40E+04	5.12E+03	10	66.5	42

Table G–274. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.21E+04	8.97E+04	8.21E+04	8.97E+04
A2	8.25E+04	8.85E+04	8.25E+04	8.85E+04
FD	8.11E+04	9.04E+04	8.11E+04	9.03E+04
L1	7.95E+04	9.11E+04	7.95E+04	9.11E+04
L3	7.87E+04	9.12E+04	7.87E+04	9.12E+04
L4	7.88E+04	9.04E+04	7.88E+04	9.03E+04
NF	—	—	—	—
NS	7.89E+04	8.91E+04	7.89E+04	8.91E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–138. Time history of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–275. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.14E+04	22	42.4	11
A2	8.77E+04	1.23E+04	13	1.64E+03	-32
FD	8.69E+04	1.65E+04	-1	1.85E+03	-32
L1	8.27E+04	1.75E+04	59	276.	3
L3	8.07E+04	2.17E+04	52	1.83E+03	-27
L4	7.89E+04	1.74E+04	42	1.02E+03	-137
NF	—	—	—	—	—
NS	7.84E+04	1.56E+04	9	562.	59

Table G–276. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(kN)	(kN)	(kN)	(kN)
A1	7.45E+04	9.73E+04	7.46E+04	9.72E+04
A2	7.61E+04	1.01E+05	7.63E+04	1.01E+05
FD	7.13E+04	1.04E+05	7.13E+04	1.04E+05
L1	6.55E+04	1.00E+05	6.56E+04	1.00E+05
L3	6.01E+04	1.04E+05	6.02E+04	1.04E+05
L4	6.06E+04	9.70E+04	6.08E+04	9.62E+04
NF	—	—	—	—
NS	6.24E+04	9.60E+04	6.28E+04	9.45E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–139. Time history of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–277. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.52E+04	22	56.7	11
A2	8.96E+04	1.87E+04	14	3.29E+03	-23
FD	8.80E+04	2.33E+04	2	2.66E+03	-12
L1	8.05E+04	2.33E+04	59	490.	3
L3	7.79E+04	3.03E+04	53	2.56E+03	-8
L4	7.46E+04	2.48E+04	32	750.	-111
NF	—	—	—	—	—
NS	7.21E+04	2.40E+04	16	807.	89

Table G–278. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	7.07E+04	1.01E+05	7.08E+04	1.01E+05
A2	7.31E+04	1.11E+05	7.33E+04	1.10E+05
FD	6.54E+04	1.12E+05	6.54E+04	1.12E+05
L1	5.77E+04	1.04E+05	5.78E+04	1.04E+05
L3	4.95E+04	1.11E+05	4.96E+04	1.11E+05
L4	4.94E+04	1.01E+05	4.98E+04	9.99E+04
NF	—	—	—	—
NS	4.71E+04	1.01E+05	4.77E+04	9.55E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–140. Time history of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–279. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.58E+04	2.28E+04	22	85.0	11
A2	9.16E+04	3.21E+04	24	5.71E+03	84
FD	9.59E+04	3.15E+04	6	3.59E+03	10
L1	7.43E+04	3.49E+04	59	1.10E+03	2
L3	7.47E+04	4.49E+04	60	3.46E+03	10
L4	7.27E+04	3.25E+04	23	952.	-27
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–280. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	6.30E+04	1.09E+05	6.33E+04	1.09E+05
A2	4.25E+04	1.23E+05	4.98E+04	1.23E+05
FD	6.46E+04	1.28E+05	6.48E+04	1.27E+05
L1	4.04E+04	1.10E+05	4.05E+04	1.10E+05
L3	3.25E+04	1.24E+05	3.26E+04	1.23E+05
L4	2.91E+04	1.10E+05	4.15E+04	1.05E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 0; Fn=0.3
fptot_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–141. Time history of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–281. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	2.31E+03	5	71.0	164
A2	8.56E+04	1.64E+03	12	79.6	15
FD	8.56E+04	2.61E+03	5	246.	-138
L1	8.15E+04	2.37E+03	55	27.7	-27
L3	8.12E+04	2.55E+03	45	267.	-111
L4	8.10E+04	3.95E+03	40	179.	-16
NF	—	—	—	—	—
NS	8.43E+04	1.83E+03	115	114.	179

Table G–282. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	8.36E+04	8.83E+04	8.36E+04	8.83E+04
A2	8.37E+04	8.74E+04	8.37E+04	8.74E+04
FD	8.31E+04	8.84E+04	8.31E+04	8.84E+04
L1	7.92E+04	8.39E+04	7.92E+04	8.39E+04
L3	7.86E+04	8.36E+04	7.86E+04	8.36E+04
L4	7.71E+04	8.59E+04	7.72E+04	8.54E+04
NF	—	—	—	—
NS	8.24E+04	8.63E+04	8.24E+04	8.62E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.3
fptot_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–142. Time history of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–283. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	6.93E+03	5	213.	164
A2	8.77E+04	9.18E+03	7	1.74E+03	-169
FD	8.69E+04	1.04E+04	-3	1.89E+03	-168
L1	7.92E+04	7.11E+03	55	256.	-29
L3	7.72E+04	8.59E+03	25	1.60E+03	-146
L4	7.83E+04	1.33E+04	35	1.28E+03	-106
NF	—	—	—	—	—
NS	7.50E+04	7.68E+03	85	2.07E+03	-125

Table G–284. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	7.89E+04	9.30E+04	7.89E+04	9.30E+04
A2	7.83E+04	9.76E+04	7.85E+04	9.75E+04
FD	7.71E+04	9.83E+04	7.71E+04	9.83E+04
L1	7.23E+04	8.65E+04	7.23E+04	8.65E+04
L3	6.80E+04	8.55E+04	6.80E+04	8.55E+04
L4	6.52E+04	9.19E+04	6.55E+04	9.15E+04
NF	—	—	—	—
NS	6.19E+04	8.25E+04	6.33E+04	8.23E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–143. Time history of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–285. Coefficients of the Fourier fit $a_0 + a_1 \sin (\omega t + \Phi_1) + a_2 \sin (2\omega t + \Phi_2) + \cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	9.26E+03	5	285.	164
A2	8.97E+04	1.42E+04	0	3.48E+03	-173
FD	8.80E+04	1.52E+04	-8	2.71E+03	172
L1	7.72E+04	9.48E+03	55	456.	-29
L3	7.45E+04	1.13E+04	18	1.88E+03	-169
L4	7.66E+04	1.90E+04	34	2.13E+03	-144
NF	—	—	—	—	—
NS	6.57E+04	1.35E+04	60	2.97E+03	-169

Table G–286. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered		Filtered	
	Minimum (kN)	Maximum (kN)	Minimum (kN)	Maximum (kN)
A1	7.65E+04	9.54E+04	7.65E+04	9.53E+04
A2	7.45E+04	1.05E+05	7.47E+04	1.05E+05
FD	7.31E+04	1.04E+05	7.31E+04	1.04E+05
L1	6.80E+04	8.70E+04	6.80E+04	8.70E+04
L3	6.22E+04	8.52E+04	6.22E+04	8.52E+04
L4	5.40E+04	9.61E+04	5.47E+04	9.47E+04
NF	—	—	—	—
NS	4.34E+04	7.82E+04	4.59E+04	7.81E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–144. Time history of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–287. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period $= 40.02$ sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.60E+04	1.39E+04	5	427.	164
A2	9.18E+04	2.27E+04	-17	5.78E+03	81
FD	9.58E+04	1.92E+04	-15	3.70E+03	150
L1	7.13E+04	1.42E+04	55	1.03E+03	-29
L3	7.18E+04	1.12E+04	14	1.54E+03	166
L4	7.94E+04	2.43E+04	34	2.62E+03	175
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–288. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period $= 40.02$ sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	7.18E+04	1.00E+05	7.18E+04	1.00E+05
A2	4.84E+04	1.13E+05	5.16E+04	1.13E+05
FD	7.65E+04	1.16E+05	7.65E+04	1.16E+05
L1	5.77E+04	8.63E+04	5.77E+04	8.63E+04
L3	5.97E+04	8.19E+04	5.97E+04	8.19E+04
L4	4.93E+04	1.03E+05	5.19E+04	1.02E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–145. Time history of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–289. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	8.17E+03	43	2.14	121
A2	8.56E+04	7.30E+03	43	508.	67
FD	8.56E+04	7.89E+03	40	266.	144
L1	8.13E+04	7.86E+03	46	23.4	-162
L3	8.10E+04	7.64E+03	43	258.	149
L4	8.06E+04	9.38E+03	38	478.	-84
NF	—	—	—	—	—
NS	8.49E+04	6.98E+03	57	113.	-174

Table G–290. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	7.73E+04	9.46E+04	7.76E+04	9.44E+04
A2	7.77E+04	9.40E+04	7.80E+04	9.37E+04
FD	7.74E+04	9.33E+04	7.74E+04	9.33E+04
L1	7.34E+04	8.92E+04	7.34E+04	8.91E+04
L3	7.30E+04	8.84E+04	7.30E+04	8.84E+04
L4	7.15E+04	9.03E+04	7.16E+04	9.03E+04
NF	—	—	—	—
NS	7.78E+04	9.20E+04	7.79E+04	9.19E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–146. Time history of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–291. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	2.46E+04	43	6.39	121
A2	8.77E+04	2.23E+04	39	1.50E+03	107
FD	8.69E+04	2.31E+04	35	2.22E+03	127
L1	7.72E+04	2.36E+04	46	198.	-161
L3	7.51E+04	2.06E+04	38	2.03E+03	127
L4	7.51E+04	2.84E+04	36	1.35E+03	-151
NF	—	—	—	—	—
NS	7.67E+04	2.17E+04	48	990.	162

Table G–292. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	6.01E+04	1.12E+05	6.11E+04	1.11E+05
A2	6.32E+04	1.11E+05	6.38E+04	1.11E+05
FD	6.08E+04	1.09E+05	6.09E+04	1.09E+05
L1	5.34E+04	1.01E+05	5.34E+04	1.01E+05
L3	5.15E+04	9.48E+04	5.15E+04	9.48E+04
L4	4.22E+04	1.04E+05	4.33E+04	1.03E+05
NF	—	—	—	—
NS	5.28E+04	9.85E+04	5.39E+04	9.79E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–147. Time history of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–293. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	3.28E+04	43	8.53	121
A2	8.96E+04	2.92E+04	37	2.50E+03	117
FD	8.80E+04	3.00E+04	32	3.70E+03	116
L1	7.35E+04	3.14E+04	46	348.	-161
L3	7.08E+04	2.51E+04	37	3.15E+03	116
L4	7.14E+04	3.81E+04	36	2.78E+03	176
NF	—	—	—	—	—
NS	7.14E+04	2.90E+04	47	1.97E+03	164

Table G–294. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	5.15E+04	1.21E+05	5.28E+04	1.20E+05
A2	5.67E+04	1.20E+05	5.71E+04	1.19E+05
FD	5.30E+04	1.16E+05	5.31E+04	1.16E+05
L1	4.18E+04	1.05E+05	4.18E+04	1.05E+05
L3	4.12E+04	9.46E+04	4.12E+04	9.46E+04
L4	2.39E+04	1.08E+05	2.48E+04	1.08E+05
NF	—	—	—	—
NS	3.77E+04	1.01E+05	3.88E+04	9.95E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 45; Fn=0.3
fptot_z (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–148. Time history of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–295. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	4.92E+04	43	12.8	121
A2	9.33E+04	3.33E+04	38	3.16E+03	74
FD	9.58E+04	3.56E+04	35	4.01E+03	117
L1	6.32E+04	4.72E+04	46	777.	-160
L3	6.35E+04	2.63E+04	47	3.14E+03	125
L4	7.22E+04	4.79E+04	43	5.34E+03	118
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–296. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	3.43E+04	1.38E+05	3.62E+04	1.37E+05
A2	3.46E+04	1.34E+05	5.74E+04	1.32E+05
FD	5.51E+04	1.30E+05	5.52E+04	1.30E+05
L1	1.53E+04	1.10E+05	1.53E+04	1.10E+05
L3	3.40E+04	8.90E+04	3.40E+04	8.90E+04
L4	1.54E+04	1.55E+05	1.94E+04	1.22E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–149. Time history of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–297. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.60E+04	1.88E+04	21	20.2	10
A2	8.57E+04	1.70E+04	19	147.	58
FD	8.56E+04	1.97E+04	19	263.	-108
L1	8.11E+04	1.84E+04	21	437.	54
L3	8.08E+04	1.77E+04	23	720.	64
L4	8.02E+04	1.85E+04	21	1.00E+03	76
NF	—	—	—	—	—
NS	8.36E+04	1.75E+04	24	116.	-69

Table G–298. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	6.71E+04	1.05E+05	6.73E+04	1.05E+05
A2	6.85E+04	1.03E+05	6.87E+04	1.03E+05
FD	6.60E+04	1.05E+05	6.62E+04	1.05E+05
L1	6.26E+04	9.94E+04	6.27E+04	9.94E+04
L3	6.28E+04	9.83E+04	6.29E+04	9.82E+04
L4	6.11E+04	9.81E+04	6.12E+04	9.80E+04
NF	—	—	—	—
NS	6.63E+04	1.01E+05	6.65E+04	1.01E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–150. Time history of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–299. Coefficients of the Fourier fit $a_0+a_1 \sin (\omega t + \Phi_1)+a_2 \sin (2\omega t + \Phi_2)+$ $\cdots$ of $F_{\dot{z}}^{\text{ptot}}$ for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.62E+04	5.66E+04	21	60.8	10
A2	8.81E+04	4.74E+04	21	2.36E+03	-103
FD	8.69E+04	5.63E+04	20	983.	-106
L1	7.56E+04	5.51E+04	21	3.93E+03	56
L3	7.35E+04	4.77E+04	26	5.87E+03	63
L4	7.17E+04	5.19E+04	21	4.43E+03	87
NF	—	—	—	—	—
NS	7.55E+04	4.88E+04	24	1.80E+03	-52

Table G–300. Minimum and maximum of of $F_{\dot{z}}^{\text{ptot}}$ for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
Code	Minimum (kN)	Maximum (kN)	Minimum (kN)	Maximum (kN)
A1	2.95E+04	1.43E+05	3.01E+04	1.42E+05
A2	4.12E+04	1.36E+05	4.19E+04	1.36E+05
FD	3.13E+04	1.44E+05	3.19E+04	1.43E+05
L1	1.90E+04	1.30E+05	1.93E+04	1.30E+05
L3	2.42E+04	1.22E+05	2.44E+04	1.22E+05
L4	1.67E+04	1.20E+05	1.76E+04	1.20E+05
NF	—	—	—	—
NS	2.96E+04	1.28E+05	3.02E+04	1.26E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.3
fptot_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–151. Time history of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–301. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.63E+04	7.56E+04	21	81.2	10
A2	9.01E+04	6.14E+04	22	3.83E+03	-103
FD	8.81E+04	7.29E+04	21	1.92E+03	-109
L1	7.07E+04	7.35E+04	21	6.99E+03	56
L3	6.80E+04	5.93E+04	29	9.45E+03	61
L4	6.62E+04	6.62E+04	22	6.51E+03	86
NF	—	—	—	—	—
NS	6.87E+04	6.00E+04	25	2.43E+03	-53

Table G–302. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	1.06E+04	1.62E+05	1.13E+04	1.61E+05
A2	2.98E+04	1.54E+05	3.04E+04	1.53E+05
FD	1.54E+04	1.62E+05	1.63E+04	1.61E+05
L1	-5.54E+03	1.44E+05	-5.23E+03	1.44E+05
L3	6.78E+03	1.31E+05	7.04E+03	1.31E+05
L4	-3.94E+03	1.26E+05	-3.18E+03	1.26E+05
NF	—	—	—	—
NS	1.29E+04	1.31E+05	1.33E+04	1.31E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–152. Time history of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–303. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.65E+04	1.13E+05	21	122.	10
A2	9.48E+04	7.71E+04	29	6.17E+03	-96
FD	9.64E+04	9.48E+04	27	1.08E+04	-111
L1	5.69E+04	1.10E+05	21	1.57E+04	56
L3	5.73E+04	7.15E+04	39	1.49E+04	50
L4	6.28E+04	7.87E+04	23	3.52E+03	-75
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–304. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.71E+04	2.00E+05	-2.59E+04	1.99E+05
A2	8.63E+03	1.81E+05	1.12E+04	1.78E+05
FD	-7.54E+03	1.96E+05	-4.77E+03	1.95E+05
L1	-6.06E+04	1.68E+05	-6.01E+04	1.67E+05
L3	-1.83E+04	1.46E+05	-1.72E+04	1.45E+05
L4	-1.82E+04	2.24E+05	-5.01E+03	1.54E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–153. Time history of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–305. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.01E+04	9	11.0	158
A2	8.56E+04	8.77E+03	5	571.	91
FD	8.56E+04	1.08E+04	9	272.	46
L1	8.13E+04	8.71E+03	16	22.3	-62
L3	8.10E+04	9.12E+03	19	257.	26
L4	8.01E+04	9.88E+03	20	777.	-158
NF	—	—	—	—	—
NS	8.38E+04	1.03E+04	8	38.4	-103

Table G–306. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	7.57E+04	9.61E+04	7.60E+04	9.60E+04
A2	7.67E+04	9.37E+04	7.69E+04	9.36E+04
FD	7.47E+04	9.62E+04	7.50E+04	9.60E+04
L1	7.26E+04	9.00E+04	7.27E+04	9.00E+04
L3	7.20E+04	9.01E+04	7.20E+04	9.00E+04
L4	6.98E+04	9.04E+04	6.99E+04	8.99E+04
NF	—	—	—	—
NS	7.33E+04	9.42E+04	7.35E+04	9.42E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–154. Time history of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–307. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	3.05E+04	9	33.1	158
A2	8.78E+04	2.79E+04	6	1.50E+03	57
FD	8.69E+04	3.35E+04	13	2.27E+03	66
L1	7.72E+04	2.61E+04	16	191.	-62
L3	7.52E+04	2.81E+04	25	1.95E+03	51
L4	7.08E+04	3.00E+04	18	2.26E+03	-173
NF	—	—	—	—	—
NS	7.61E+04	2.95E+04	8	954.	168

Table G–308. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	5.52E+04	1.17E+05	5.61E+04	1.16E+05
A2	5.92E+04	1.15E+05	5.99E+04	1.14E+05
FD	5.26E+04	1.19E+05	5.33E+04	1.19E+05
L1	5.13E+04	1.04E+05	5.15E+04	1.03E+05
L3	4.76E+04	1.03E+05	4.78E+04	1.03E+05
L4	3.85E+04	1.00E+05	3.89E+04	9.98E+04
NF	—	—	—	—
NS	4.47E+04	1.11E+05	4.56E+04	1.06E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–155. Time history of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–309. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} + \cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.60E+04	4.08E+04	9	44.2	158
A2	8.97E+04	3.79E+04	8	2.44E+03	49
FD	8.79E+04	4.48E+04	15	3.76E+03	78
L1	7.37E+04	3.48E+04	16	336.	-62
L3	7.09E+04	3.69E+04	28	2.96E+03	62
L4	6.48E+04	4.01E+04	18	3.08E+03	177
NF	—	—	—	—	—
NS	6.98E+04	3.93E+04	13	990.	169

Table G–310. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	4.49E+04	1.27E+05	4.61E+04	1.26E+05
A2	5.05E+04	1.27E+05	5.14E+04	1.26E+05
FD	4.07E+04	1.30E+05	4.18E+04	1.30E+05
L1	3.92E+04	1.09E+05	3.95E+04	1.09E+05
L3	3.44E+04	1.08E+05	3.47E+04	1.07E+05
L4	2.05E+04	1.05E+05	2.11E+04	1.03E+05
NF	—	—	—	—
NS	2.80E+04	1.16E+05	2.86E+04	1.10E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 135; Fn=0.3
fptot_z (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–156. Time history of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–311. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.60E+04	6.11E+04	9	66.3	158
A2	9.35E+04	5.09E+04	18	3.96E+03	85
FD	9.57E+04	5.89E+04	19	4.08E+03	77
L1	6.35E+04	5.22E+04	16	752.	-63
L3	6.39E+04	4.75E+04	39	2.64E+03	55
L4	6.00E+04	4.54E+04	16	2.25E+03	152
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–312. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	2.44E+04	1.47E+05	2.62E+04	1.46E+05
A2	3.73E+04	1.42E+05	4.17E+04	1.40E+05
FD	3.37E+04	1.53E+05	3.54E+04	1.53E+05
L1	1.20E+04	1.16E+05	1.24E+04	1.16E+05
L3	1.87E+04	1.12E+05	1.90E+04	1.12E+05
L4	1.03E+03	1.08E+05	3.90E+03	1.04E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–157. Time history of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–313. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	3.34E+03	-6	49.9	-69
A2	8.56E+04	2.36E+03	-20	163.	-172
FD	8.56E+04	4.04E+03	-49	239.	-121
L1	8.15E+04	3.17E+03	17	31.9	108
L3	8.11E+04	3.81E+03	14	224.	-96
L4	8.02E+04	4.86E+03	13	255.	95
NF	—	—	—	—	—
NS	8.39E+04	4.63E+03	-7	66.4	-70

Table G–314. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	8.26E+04	8.94E+04	8.27E+04	8.92E+04
A2	8.30E+04	8.83E+04	8.33E+04	8.81E+04
FD	8.16E+04	8.97E+04	8.17E+04	8.96E+04
L1	7.83E+04	8.46E+04	7.83E+04	8.46E+04
L3	7.74E+04	8.52E+04	7.75E+04	8.51E+04
L4	7.52E+04	8.47E+04	7.53E+04	8.46E+04
NF	—	—	—	—
NS	7.93E+04	8.86E+04	7.94E+04	8.85E+04

Figure G–158. Time history of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–315. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.58E+04	1.01E+04	-6	150.	-69
A2	8.76E+04	1.13E+04	-18	1.74E+03	-47
FD	8.69E+04	1.46E+04	-42	1.92E+03	-91
L1	7.86E+04	9.52E+03	17	289.	116
L3	7.66E+04	1.44E+04	16	1.29E+03	-54
L4	7.15E+04	1.57E+04	5	255.	-108
NF	8.01E+04	1.33E+04	103	1.84E+03	117
NS	7.71E+04	1.42E+04	-4	290.	-10

Table G–316. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	7.58E+04	9.65E+04	7.61E+04	9.58E+04
A2	7.68E+04	1.00E+05	7.70E+04	9.91E+04
FD	7.27E+04	1.02E+05	7.31E+04	1.01E+05
L1	6.88E+04	8.78E+04	6.89E+04	8.77E+04
L3	6.31E+04	9.24E+04	6.32E+04	9.22E+04
L4	5.65E+04	8.87E+04	5.68E+04	8.70E+04
NF	6.85E+04	9.54E+04	6.89E+04	9.42E+04
NS	6.23E+04	9.65E+04	6.31E+04	9.26E+04

Figure G–159. Time history of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–317. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.58E+04	1.34E+04	-6	200.	-69
A2	8.95E+04	1.69E+04	-13	3.42E+03	-38
FD	8.80E+04	2.05E+04	-38	2.79E+03	-70
L1	7.61E+04	1.27E+04	17	516.	117
L3	7.34E+04	2.03E+04	19	1.66E+03	-25
L4	6.62E+04	2.20E+04	3	160.	-117
NF	8.13E+04	1.87E+04	106	2.40E+03	101
NS	7.17E+04	2.17E+04	4	166.	134

Table G–318. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	7.25E+04	1.00E+05	7.29E+04	9.91E+04
A2	7.25E+04	1.08E+05	7.30E+04	1.07E+05
FD	6.73E+04	1.08E+05	6.79E+04	1.08E+05
L1	6.29E+04	8.83E+04	6.31E+04	8.82E+04
L3	5.43E+04	9.53E+04	5.45E+04	9.50E+04
L4	4.48E+04	8.98E+04	4.55E+04	8.75E+04
NF	6.54E+04	1.02E+05	6.56E+04	1.01E+05
NS	4.92E+04	1.09E+05	5.02E+04	9.56E+04

Data identically zero, insufficient, or not available from NSHIPMO.

Figure G–160. Time history of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–319. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.57E+04	2.01E+04	-6	301.	-69
A2	9.17E+04	2.73E+04	1	5.11E+03	71
FD	9.58E+04	2.68E+04	-34	3.74E+03	-49
L1	6.90E+04	1.90E+04	17	1.16E+03	118
L3	6.94E+04	2.79E+04	29	1.94E+03	19
L4	6.15E+04	2.62E+04	2	1.91E+03	-165
NF	8.00E+04	2.57E+04	86	3.11E+03	9
NS	—	—	—	—	—

Table G–320. Minimum and maximum of of F_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	6.57E+04	1.07E+05	6.64E+04	1.06E+05
A2	4.74E+04	1.16E+05	5.86E+04	1.15E+05
FD	6.80E+04	1.22E+05	6.88E+04	1.21E+05
L1	4.88E+04	8.68E+04	4.91E+04	8.67E+04
L3	4.22E+04	9.91E+04	4.25E+04	9.87E+04
L4	2.25E+04	9.49E+04	3.64E+04	8.65E+04
NF	5.53E+04	1.10E+05	5.56E+04	1.10E+05
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 0; Fn=0.0
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–161. Time history of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–321. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	7.12E-04	0.131	178	6.72E-04	26
A2	6.68E-04	9.55E-02	173	6.76E-04	17
FD	-2.22E-05	1.42E-05	110	9.32E-05	128
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.44E-04	1.26E-03	-6	2.43E-03	117

Table G–322. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.138	0.137	-0.136	0.135
A2	-0.104	0.102	-0.102	0.101
FD	-7.35E-04	6.45E-04	-2.09E-04	2.55E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.74E-02	1.88E-02	-5.16E-03	5.44E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–162. Time history of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–323. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.14E-03	0.393	178	2.02E-03	26
A2	318.	536.	-19	313.	-147
FD	9.23E-06	3.12E-05	88	3.10E-05	-11
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	5.21E-04	2.03E-03	68	6.85E-03	63

Table G–324. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.415	0.411	-0.410	0.405
A2	-0.313	2.24E+04	-315.	2.99E+03
FD	-8.14E-04	1.09E-03	-1.97E-04	2.28E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-6.61E-02	5.47E-02	-1.96E-02	3.10E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 0; Fn=0.0
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–163. Time history of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–325. Coefficients of the Fourier fit $a_0+a_1 \sin{(\omega t + \Phi_1)}+a_2 \sin{(2\omega t + \Phi_2)}+$ $\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.86E-03	0.525	178	2.70E-03	26
A2	54.3	116.	70	135.	45
FD	1.29E-05	7.71E-05	36	4.87E-05	-52
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	2.26E-03	9.63E-04	-112	3.96E-03	-56

Table G–326. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.555	0.549	-0.547	0.541
A2	-0.418	1.03E+04	-118.	1.38E+03
FD	-6.59E-04	8.22E-04	-1.95E-04	2.99E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-8.51E-02	7.21E-02	-9.58E-03	3.66E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 0; Fn=0.0
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–164. Time history of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–327. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	4.29E-03	0.788	178	4.05E-03	26
A2	3.81	8.56	126	11.0	150
FD	-4.06E-05	2.49E-05	170	4.80E-05	-31
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–328. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.832	0.823	-0.820	0.812
A2	-199.	519.	-24.3	73.4
FD	-1.08E-03	1.08E-03	-3.05E-04	2.44E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 45; Fn=0.0
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–165. Time history of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–329. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.92	1.15E+04	-68	8.67	-138
A2	26.7	1.12E+04	-69	1.15E+03	-42
FD	-8.77	1.23E+04	-75	467.	20
L1	544.	1.20E+04	-69	436.	-114
L3	538.	1.16E+04	-71	310.	-31
L4	357.	1.15E+04	-70	110.	-41
NF	—	—	—	—	—
NS	79.0	1.07E+04	-65	348.	33

Table G–330. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.15E+04	1.15E+04	-1.14E+04	1.14E+04
A2	-1.26E+04	1.08E+04	-1.23E+04	1.06E+04
FD	-1.23E+04	1.22E+04	-1.22E+04	1.21E+04
L1	-1.16E+04	1.24E+04	-1.16E+04	1.23E+04
L3	-1.12E+04	1.17E+04	-1.11E+04	1.17E+04
L4	-1.14E+04	1.18E+04	-1.10E+04	1.15E+04
NF	—	—	—	—
NS	-1.10E+04	1.08E+04	-1.09E+04	1.06E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 45; Fn=0.0
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–166. Time history of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–331. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$,
$F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	8.80	3.46E+04	-68	26.1	-138
A2	-103.	3.35E+04	-73	1.56E+03	-12
FD	-78.8	3.62E+04	-77	3.44E+03	3
L1	4.86E+03	3.59E+04	-69	3.95E+03	-115
L3	4.89E+03	3.28E+04	-75	3.57E+03	-63
L4	2.15E+03	3.28E+04	-72	1.49E+03	-96
NF	—	—	—	—	—
NS	-114.	3.00E+04	-65	2.67E+03	26

Table G–332. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/20$,
$\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.47E+04	3.46E+04	-3.43E+04	3.43E+04
A2	-3.75E+04	3.12E+04	-3.49E+04	3.10E+04
FD	-3.66E+04	3.43E+04	-3.62E+04	3.40E+04
L1	-3.33E+04	4.01E+04	-3.31E+04	3.99E+04
L3	-2.99E+04	3.32E+04	-2.98E+04	3.32E+04
L4	-3.20E+04	3.50E+04	-2.98E+04	3.27E+04
NF	—	—	—	—
NS	-3.29E+04	2.89E+04	-3.08E+04	2.84E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–167. Time history of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–333. Coefficients of the Fourier fit $a_0 + a_1 \sin (\omega t + \Phi_1) + a_2 \sin (2\omega t + \Phi_2) +$ $\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	11.7	4.62E+04	-68	34.8	-138
A2	-143.	4.41E+04	-75	3.01E+03	24
FD	-82.5	4.77E+04	-78	5.03E+03	-7
L1	8.63E+03	4.79E+04	-69	7.03E+03	-115
L3	8.71E+03	4.23E+04	-76	6.79E+03	-77
L4	-134.	4.36E+04	-68	1.67E+03	-126
NF	—	—	—	—	—
NS	-1.61E+03	3.88E+04	-73	1.36E+03	33

Table G–334. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.63E+04	4.63E+04	-4.58E+04	4.58E+04
A2	-4.77E+04	4.27E+04	-4.62E+04	4.15E+04
FD	-4.86E+04	4.46E+04	-4.82E+04	4.43E+04
L1	-4.34E+04	5.58E+04	-4.32E+04	5.56E+04
L3	-3.79E+04	4.43E+04	-3.77E+04	4.42E+04
L4	-4.70E+04	4.44E+04	-4.14E+04	4.21E+04
NF	—	—	—	—
NS	-3.76E+04	3.57E+04	-3.76E+04	3.49E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 45; Fn=0.0
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–168. Time history of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–335. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	17.6	6.94E+04	-68	52.2	-138
A2	-1.18E+03	6.54E+04	-75	7.76E+03	-52
FD	-68.8	6.93E+04	-79	5.32E+03	-13
L1	1.94E+04	7.19E+04	-69	1.58E+04	-115
L3	1.94E+04	5.86E+04	-78	1.52E+04	-99
L4	-9.42E+03	6.40E+04	-72	1.01E+04	-158
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–336. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-6.94E+04	6.94E+04	-6.87E+04	6.87E+04
A2	-8.23E+04	6.20E+04	-6.92E+04	6.05E+04
FD	-7.05E+04	6.64E+04	-6.97E+04	6.57E+04
L1	-6.28E+04	9.17E+04	-6.23E+04	9.14E+04
L3	-5.09E+04	7.10E+04	-5.05E+04	7.08E+04
L4	-9.58E+04	6.66E+04	-7.62E+04	6.07E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.0
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–169. Time history of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–337. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	17.8	2.16E+04	-100	24.1	-166
A2	26.0	2.01E+04	-102	646.	-63
FD	-17.7	2.08E+04	-104	766.	161
L1	1.39E+03	2.27E+04	-98	1.84E+03	-146
L3	1.39E+03	2.12E+04	-98	1.92E+03	-146
L4	709.	2.07E+04	-96	1.47E+03	-173
NF	—	—	—	—	—
NS	87.1	1.85E+04	-94	1.17E+03	130

Table G–338. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.16E+04	2.17E+04	-2.17E+04	2.14E+04
A2	-2.48E+04	2.50E+04	-2.47E+04	2.38E+04
FD	-2.17E+04	2.14E+04	-2.17E+04	2.11E+04
L1	-2.28E+04	2.28E+04	-2.28E+04	2.27E+04
L3	-2.22E+04	2.22E+04	-2.22E+04	2.21E+04
L4	-2.15E+04	2.36E+04	-2.13E+04	2.25E+04
NF	—	—	—	—
NS	-1.80E+04	1.98E+04	-1.79E+04	1.96E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.0
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–170. Time history of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–339. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	53.5	6.51E+04	-100	72.5	-166
A2	-234.	5.89E+04	-103	1.15E+04	161
FD	-48.3	5.92E+04	-104	6.12E+03	164
L1	1.25E+04	6.80E+04	-98	1.66E+04	-146
L3	1.25E+04	5.80E+04	-99	1.82E+04	-149
L4	4.47E+03	5.88E+04	-96	1.38E+04	-180
NF	—	—	—	—	—
NS	-224.	5.20E+04	-93	1.13E+04	141

Table G–340. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-6.50E+04	6.52E+04	-6.52E+04	6.43E+04
A2	-6.33E+04	6.06E+04	-5.95E+04	5.88E+04
FD	-6.36E+04	6.20E+04	-6.31E+04	6.07E+04
L1	-7.01E+04	7.42E+04	-6.96E+04	7.40E+04
L3	-6.46E+04	6.72E+04	-6.40E+04	6.69E+04
L4	-6.22E+04	7.96E+04	-6.02E+04	7.70E+04
NF	—	—	—	—
NS	-5.14E+04	6.75E+04	-4.75E+04	6.36E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.0
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–171. Time history of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–341. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	71.4	8.69E+04	-100	96.9	-166
A2	197.	7.93E+04	-103	1.97E+04	162
FD	-78.4	7.78E+04	-104	1.35E+04	163
L1	2.22E+04	9.07E+04	-98	2.94E+04	-146
L3	2.22E+04	7.43E+04	-99	3.45E+04	-152
L4	-502.	7.69E+04	-91	3.19E+04	166
NF	—	—	—	—	—
NS	-1.97E+03	6.36E+04	-95	2.00E+04	138

Table G–342. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-8.68E+04	8.70E+04	-8.71E+04	8.58E+04
A2	-8.98E+04	8.42E+04	-8.48E+04	8.01E+04
FD	-8.47E+04	8.19E+04	-8.34E+04	8.02E+04
L1	-9.48E+04	1.07E+05	-9.41E+04	1.06E+05
L3	-8.59E+04	9.46E+04	-8.49E+04	9.44E+04
L4	-8.98E+04	1.17E+05	-8.56E+04	1.10E+05
NF	—	—	—	—
NS	-6.35E+04	8.65E+04	-6.22E+04	8.15E+04

G–583

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.0
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–172. Time history of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–343. Coefficients of the Fourier fit $a_0+a_1\sin\left(\omega t+\Phi_1\right)+a_2\sin\left(2\omega t+\Phi_2\right)+$ $\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	107.	1.30E+05	-100	145.	-166
A2	161.	1.21E+05	-103	5.21E+04	164
FD	109.	1.15E+05	-104	4.20E+04	163
L1	5.00E+04	1.36E+05	-98	6.62E+04	-146
L3	5.00E+04	1.04E+05	-99	8.53E+04	-156
L4	-2.35E+04	1.26E+05	-105	1.06E+05	161
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–344. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.30E+05	1.31E+05	-1.31E+05	1.29E+05
A2	-1.71E+05	1.55E+05	-1.59E+05	1.46E+05
FD	-1.34E+05	1.24E+05	-1.33E+05	1.22E+05
L1	-1.47E+05	1.89E+05	-1.45E+05	1.88E+05
L3	-1.31E+05	1.83E+05	-1.30E+05	1.82E+05
L4	-2.32E+05	2.11E+05	-2.20E+05	1.95E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.0
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–173. Time history of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–345. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	14.4	1.24E+04	-130	14.6	169
A2	29.7	1.18E+04	-133	1.03E+03	-10
FD	8.40	1.29E+04	-135	426.	-52
L1	840.	1.24E+04	-127	428.	-141
L3	843.	1.20E+04	-126	638.	-91
L4	695.	1.20E+04	-126	529.	-85
NF	—	—	—	—	—
NS	71.7	1.10E+04	-124	326.	-6

Table G–346. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.24E+04	1.24E+04	-1.23E+04	1.22E+04
A2	-1.14E+04	1.33E+04	-1.12E+04	1.29E+04
FD	-1.25E+04	1.30E+04	-1.24E+04	1.29E+04
L1	-1.20E+04	1.29E+04	-1.19E+04	1.28E+04
L3	-1.13E+04	1.25E+04	-1.12E+04	1.25E+04
L4	-1.16E+04	1.30E+04	-1.14E+04	1.24E+04
NF	—	—	—	—
NS	-1.08E+04	1.17E+04	-1.06E+04	1.15E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–174. Time history of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–347. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	43.2	3.72E+04	-130	44.0	169
A2	178.	3.59E+04	-130	1.44E+03	-8
FD	108.	3.74E+04	-134	3.09E+03	-37
L1	7.50E+03	3.73E+04	-127	3.77E+03	-141
L3	7.48E+03	3.38E+04	-123	4.07E+03	-92
L4	3.60E+03	3.65E+04	-123	3.28E+03	-92
NF	—	—	—	—	—
NS	-144.	3.21E+04	-122	3.34E+03	13

Table G–348. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.72E+04	3.72E+04	-3.68E+04	3.68E+04
A2	-3.42E+04	3.93E+04	-3.37E+04	3.72E+04
FD	-3.45E+04	3.92E+04	-3.42E+04	3.87E+04
L1	-3.34E+04	4.15E+04	-3.32E+04	4.14E+04
L3	-2.74E+04	3.93E+04	-2.72E+04	3.92E+04
L4	-3.52E+04	4.06E+04	-3.34E+04	3.86E+04
NF	—	—	—	—
NS	-3.24E+04	3.69E+04	-2.86E+04	3.53E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.0
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–175. Time history of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–349. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	57.7	4.97E+04	-130	58.8	169
A2	582.	4.77E+04	-128	2.54E+03	-35
FD	173.	4.92E+04	-133	4.57E+03	-29
L1	1.33E+04	4.97E+04	-127	6.69E+03	-141
L3	1.33E+04	4.35E+04	-122	6.03E+03	-100
L4	1.80E+03	4.84E+04	-119	2.20E+03	-108
NF	—	—	—	—	—
NS	-1.66E+03	4.19E+04	-115	4.18E+03	49

Table G–350. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.97E+04	4.96E+04	-4.92E+04	4.91E+04
A2	-4.56E+04	6.87E+04	-4.50E+04	4.95E+04
FD	-4.49E+04	5.21E+04	-4.45E+04	5.15E+04
L1	-4.28E+04	5.74E+04	-4.25E+04	5.73E+04
L3	-3.29E+04	5.36E+04	-3.27E+04	5.35E+04
L4	-5.02E+04	4.85E+04	-4.74E+04	4.69E+04
NF	—	—	—	—
NS	-5.14E+04	4.42E+04	-3.96E+04	4.36E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–176. Time history of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–351. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$,
$F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	86.5	7.46E+04	-130	88.2	169
A2	324.	6.97E+04	-127	7.33E+03	-8
FD	147.	7.14E+04	-132	4.92E+03	-23
L1	2.99E+04	7.46E+04	-127	1.50E+04	-141
L3	2.99E+04	6.02E+04	-122	1.31E+04	-125
L4	-1.08E+04	7.25E+04	-124	1.39E+04	-130
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–352. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/10$,
$\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-7.45E+04	7.45E+04	-7.38E+04	7.37E+04
A2	-6.30E+04	7.57E+04	-6.25E+04	7.29E+04
FD	-6.65E+04	7.45E+04	-6.60E+04	7.38E+04
L1	-5.91E+04	9.31E+04	-5.86E+04	9.30E+04
L3	-4.10E+04	8.22E+04	-4.07E+04	8.19E+04
L4	-9.88E+04	1.30E+05	-9.32E+04	5.98E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–177. Time history of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–353. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.38E-05	2.94E-02	132	2.52E-04	177
A2	-1.98E-05	1.77E-02	31	2.98E-04	-150
FD	2.10E-05	8.39E-04	59	9.52E-05	14
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.77E-04	3.62E-04	-28	1.15E-03	138

Table G–354. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.94E-02	2.99E-02	-2.91E-02	2.96E-02
A2	-1.74E-02	1.86E-02	-1.72E-02	1.83E-02
FD	-5.03E-03	4.25E-03	-1.00E-03	1.26E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.52E-02	1.61E-02	-2.57E-03	4.31E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 180; Fn=0.0
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–178. Time history of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–355. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	4.15E-05	8.83E-02	132	7.57E-04	177
A2	-121.	701.	-65	571.	-80
FD	1.26E-04	2.45E-03	60	2.90E-04	45
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-6.69E-04	3.83E-03	-55	2.77E-03	123

Table G–356. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-8.86E-02	8.99E-02	-8.75E-02	8.89E-02
A2	-3.53E+04	8.83E+03	-4.73E+03	1.18E+03
FD	-1.36E-02	1.31E-02	-2.82E-03	3.37E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-4.15E-02	6.10E-02	-2.57E-02	1.86E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 180; Fn=0.0
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–179. Time history of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–357. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	5.55E-05	0.118	132	1.01E-03	177
A2	70.1	137.	51	139.	3
FD	2.86E-04	3.34E-03	64	3.39E-04	52
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-4.12E-04	8.25E-03	-78	2.66E-03	-47

Table G–358. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.118	0.120	-0.117	0.119
A2	-7.00E-02	1.23E+04	-141.	1.65E+03
FD	-1.77E-02	2.17E-02	-3.80E-03	4.98E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.268	0.277	-1.37E-02	9.06E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 180; Fn=0.0
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–180. Time history of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–359. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	8.32E-05	0.177	132	1.52E-03	177
A2	-80.9	631.	61	584.	180
FD	4.70E-04	4.72E-03	63	8.82E-04	22
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–360. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.177	0.180	-0.175	0.178
A2	-4.48E+04	3.06E+04	-6.00E+03	4.29E+03
FD	-2.80E-02	3.82E-02	-5.38E-03	8.34E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–181. Time history of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–361. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.45E-04	0.260	-83	1.98E-03	-116
A2	2.35E-04	0.258	-75	2.04E-03	-116
FD	-1.33E-05	6.94E-05	-35	1.64E-05	-32
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-4.57E-04	1.04E-03	168	2.48E-03	41

Table G–362. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.264	0.260	-0.264	0.260
A2	-0.260	0.258	-0.260	0.257
FD	-7.80E-04	8.37E-04	-2.82E-04	3.00E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-2.87E-02	2.54E-02	-1.53E-02	1.71E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.3
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–182. Time history of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–363. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	7.37E-04	0.783	-83	5.97E-03	-116
A2	137.	200.	-10	55.9	-148
FD	-2.12E-05	2.74E-05	-94	1.28E-05	-45
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	9.44E-04	5.28E-03	13	7.16E-03	46

Table G–364. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.795	0.783	-0.794	0.783
A2	-0.783	2.24E+04	-371.	4.76E+03
FD	-8.36E-04	1.02E-03	-2.79E-04	3.25E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.283	0.298	-2.79E-02	2.45E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 0; Fn=0.3
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–183. Time history of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–365. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	9.85E-04	1.05	-83	7.97E-03	-116
A2	72.1	32.0	-21	89.5	82
FD	2.54E-05	3.71E-05	7	5.99E-05	105
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.86E-03	1.06E-03	160	6.20E-03	-135

Table G–366. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.06	1.05	-1.06	1.04
A2	-1.05	1.04E+04	-119.	1.38E+03
FD	-9.75E-04	1.18E-03	-2.58E-04	3.10E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-4.68E-02	4.63E-02	-2.38E-02	3.13E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 0; Fn=0.3
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–184. Time history of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–367. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.48E-03	1.57	-83	1.20E-02	-116
A2	-361.	672.	-43	618.	13
FD	-7.41E-06	4.29E-05	-59	3.65E-05	-52
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–368. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.59	1.57	-1.59	1.57
A2	-8.25E+04	1.26E+04	-1.11E+04	1.68E+03
FD	-1.31E-03	1.47E-03	-4.63E-04	5.87E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–185. Time history of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–369. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-2.46	1.09E+04	-61	4.41	72
A2	36.8	1.05E+04	-61	1.16E+03	-26
FD	-4.21	9.56E+03	-54	429.	45
L1	723.	1.01E+04	-54	81.3	52
L3	722.	9.64E+03	-56	542.	43
L4	1.01E+03	1.04E+04	-55	446.	61
NF	—	—	—	—	—
NS	-1.74	1.06E+04	-56	353.	73

Table G–370. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.09E+04	1.10E+04	-1.09E+04	1.08E+04
A2	-1.20E+04	1.01E+04	-1.19E+04	1.01E+04
FD	-9.62E+03	9.27E+03	-9.60E+03	9.26E+03
L1	-9.38E+03	1.08E+04	-9.37E+03	1.08E+04
L3	-8.99E+03	1.00E+04	-8.98E+03	1.00E+04
L4	-9.41E+03	1.27E+04	-9.32E+03	1.13E+04
NF	—	—	—	—
NS	-1.06E+04	1.08E+04	-1.05E+04	1.07E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 45; Fn=0.3
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–186. Time history of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–371. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-7.41	3.28E+04	-61	13.3	72
A2	-70.8	3.16E+04	-65	1.37E+03	10
FD	-6.05	2.77E+04	-56	3.14E+03	29
L1	6.51E+03	3.02E+04	-54	727.	52
L3	6.48E+03	2.67E+04	-59	3.72E+03	29
L4	6.33E+03	2.91E+04	-55	4.26E+03	41
NF	—	—	—	—	—
NS	-1.41E+03	3.25E+04	-61	990.	10

Table G–372. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.28E+04	3.32E+04	-3.27E+04	3.26E+04
A2	-3.56E+04	2.99E+04	-3.51E+04	2.92E+04
FD	-2.88E+04	2.51E+04	-2.87E+04	2.51E+04
L1	-2.40E+04	3.65E+04	-2.40E+04	3.65E+04
L3	-2.14E+04	3.07E+04	-2.14E+04	3.07E+04
L4	-2.47E+04	4.15E+04	-2.38E+04	3.46E+04
NF	—	—	—	—
NS	-3.56E+04	3.09E+04	-3.40E+04	3.05E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–187. Time history of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–373. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$,
$F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves
of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-9.90	4.38E+04	-61	17.7	72
A2	-75.1	4.16E+04	-67	3.19E+03	45
FD	-6.76	3.62E+04	-57	4.64E+03	20
L1	1.16E+04	4.03E+04	-54	1.29E+03	52
L3	1.15E+04	3.40E+04	-61	5.33E+03	23
L4	6.15E+03	3.74E+04	-49	6.35E+03	49
NF	—	—	—	—	—
NS	-2.80E+03	4.24E+04	-62	1.88E+03	-6

Table G–374. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/15$,
$\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.38E+04	4.43E+04	-4.37E+04	4.36E+04
A2	-4.51E+04	4.04E+04	-4.44E+04	3.92E+04
FD	-3.82E+04	3.24E+04	-3.81E+04	3.23E+04
L1	-2.92E+04	5.15E+04	-2.92E+04	5.15E+04
L3	-2.45E+04	4.21E+04	-2.45E+04	4.21E+04
L4	-3.32E+04	5.05E+04	-3.21E+04	4.09E+04
NF	—	—	—	—
NS	-4.86E+04	3.83E+04	-4.62E+04	3.72E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–188. Time history of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–375. Coefficients of the Fourier fit $a_0+a_1 \sin{(\omega t + \Phi_1)}+a_2 \sin{(2\omega t + \Phi_2)}+$ $\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-14.8	6.57E+04	-61	26.6	72
A2	-997.	6.25E+04	-68	7.96E+03	-32
FD	-41.8	5.20E+04	-58	5.01E+03	13
L1	2.60E+04	6.04E+04	-54	2.90E+03	52
L3	2.60E+04	4.61E+04	-61	6.38E+03	26
L4	-4.71E+03	6.15E+04	-56	1.23E+04	-29
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–376. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-6.57E+04	6.64E+04	-6.56E+04	6.54E+04
A2	-1.42E+05	5.87E+04	-6.99E+04	5.97E+04
FD	-5.41E+04	4.81E+04	-5.39E+04	4.80E+04
L1	-3.56E+04	8.58E+04	-3.56E+04	8.57E+04
L3	-2.20E+04	6.90E+04	-2.19E+04	6.90E+04
L4	-2.55E+05	6.77E+04	-1.13E+05	4.91E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.3
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–189. Time history of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–377. Coefficients of the Fourier fit $a_0+a_1\sin\left(\omega t + \Phi_1\right)+a_2\sin\left(2\omega t + \Phi_2\right)+$ $\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	11.3	2.27E+04	-98	33.7	-163
A2	19.5	2.12E+04	-100	645.	-64
FD	-17.6	2.08E+04	-103	766.	161
L1	936.	2.26E+04	-90	1.48E+03	-164
L3	928.	2.12E+04	-90	1.55E+03	-163
L4	1.05E+03	2.04E+04	-89	1.04E+03	167
NF	—	—	—	—	—
NS	-128.	1.88E+04	-97	1.37E+03	119

Table G–378. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.29E+04	2.29E+04	-2.29E+04	2.24E+04
A2	-2.61E+04	2.63E+04	-2.59E+04	2.48E+04
FD	-2.17E+04	2.14E+04	-2.17E+04	2.11E+04
L1	-2.23E+04	2.33E+04	-2.24E+04	2.33E+04
L3	-2.17E+04	2.26E+04	-2.18E+04	2.25E+04
L4	-2.04E+04	2.42E+04	-1.98E+04	2.30E+04
NF	—	—	—	—
NS	-1.83E+04	2.00E+04	-1.82E+04	1.97E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.3
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–190. Time history of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–379. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	33.9	6.84E+04	-98	101.	-163
A2	-254.	6.20E+04	-100	1.15E+04	161
FD	-48.1	5.91E+04	-103	6.12E+03	164
L1	8.39E+03	6.78E+04	-90	1.33E+04	-164
L3	8.37E+03	5.79E+04	-89	1.51E+04	-166
L4	6.12E+03	5.61E+04	-91	1.17E+04	160
NF	—	—	—	—	—
NS	-1.28E+03	5.22E+04	-96	1.21E+04	138

Table G–380. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-6.90E+04	6.90E+04	-6.89E+04	6.73E+04
A2	-6.61E+04	6.42E+04	-6.31E+04	6.19E+04
FD	-6.35E+04	6.20E+04	-6.30E+04	6.08E+04
L1	-6.67E+04	7.76E+04	-6.63E+04	7.73E+04
L3	-6.16E+04	7.03E+04	-6.15E+04	7.00E+04
L4	-5.21E+04	8.34E+04	-5.17E+04	7.92E+04
NF	—	—	—	—
NS	-5.40E+04	6.67E+04	-5.08E+04	6.29E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.3
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–191. Time history of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–381. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	45.3	9.13E+04	-98	136.	-163
A2	110.	8.35E+04	-101	1.97E+04	162
FD	-78.1	7.77E+04	-103	1.35E+04	163
L1	1.49E+04	9.04E+04	-90	2.36E+04	-164
L3	1.49E+04	7.42E+04	-89	2.95E+04	-168
L4	4.70E+03	7.30E+04	-92	2.53E+04	151
NF	—	—	—	—	—
NS	-1.02E+03	6.36E+04	-94	1.98E+04	143

Table G–382. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-9.21E+04	9.22E+04	-9.20E+04	8.98E+04
A2	-9.29E+04	8.92E+04	-8.77E+04	8.48E+04
FD	-8.45E+04	8.19E+04	-8.33E+04	8.03E+04
L1	-8.97E+04	1.10E+05	-8.91E+04	1.10E+05
L3	-8.10E+04	9.80E+04	-8.02E+04	9.78E+04
L4	-6.82E+04	1.18E+05	-6.73E+04	1.11E+05
NF	—	—	—	—
NS	-6.39E+04	8.62E+04	-6.27E+04	8.14E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.3
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–192. Time history of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–383. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	67.9	1.37E+05	-98	203.	-163
A2	121.	1.28E+05	-100	5.21E+04	164
FD	110.	1.15E+05	-104	4.20E+04	163
L1	3.35E+04	1.36E+05	-90	5.30E+04	-164
L3	3.36E+04	1.04E+05	-89	7.53E+04	-171
L4	-1.62E+04	1.16E+05	-110	7.47E+04	139
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–384. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.38E+05	1.38E+05	-1.38E+05	1.35E+05
A2	-1.73E+05	1.64E+05	-1.61E+05	1.54E+05
FD	-1.34E+05	1.24E+05	-1.33E+05	1.23E+05
L1	-1.38E+05	1.88E+05	-1.37E+05	1.87E+05
L3	-1.22E+05	1.79E+05	-1.21E+05	1.78E+05
L4	-3.13E+05	1.90E+05	-1.69E+05	1.76E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.3
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–193. Time history of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–385. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.42	1.30E+04	-136	33.8	163
A2	43.8	1.26E+04	-140	1.00E+03	-14
FD	8.27	1.35E+04	-142	456.	-34
L1	618.	1.37E+04	-130	169.	132
L3	619.	1.32E+04	-130	330.	-42
L4	678.	1.20E+04	-128	475.	10
NF	—	—	—	—	—
NS	-12.8	1.05E+04	-136	462.	-56

Table G–386. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.31E+04	1.30E+04	-1.28E+04	1.27E+04
A2	-1.20E+04	1.38E+04	-1.15E+04	1.31E+04
FD	-1.30E+04	1.38E+04	-1.28E+04	1.35E+04
L1	-1.31E+04	1.42E+04	-1.30E+04	1.41E+04
L3	-1.22E+04	1.38E+04	-1.21E+04	1.37E+04
L4	-1.12E+04	1.32E+04	-1.06E+04	1.29E+04
NF	—	—	—	—
NS	-1.04E+04	1.14E+04	-1.03E+04	1.11E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–194. Time history of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–387. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	7.29	3.92E+04	-136	102.	163
A2	155.	3.77E+04	-137	1.37E+03	-23
FD	41.0	3.91E+04	-141	3.28E+03	-16
L1	5.55E+03	4.10E+04	-130	1.50E+03	132
L3	5.59E+03	3.71E+04	-128	1.85E+03	-7
L4	3.89E+03	3.42E+04	-125	3.59E+03	-12
NF	—	—	—	—	—
NS	-453.	2.83E+04	-131	5.09E+03	-3

Table G–388. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.94E+04	3.92E+04	-3.85E+04	3.82E+04
A2	-3.74E+04	4.08E+04	-3.61E+04	3.75E+04
FD	-3.61E+04	4.19E+04	-3.56E+04	4.08E+04
L1	-3.63E+04	4.58E+04	-3.60E+04	4.55E+04
L3	-2.93E+04	4.30E+04	-2.90E+04	4.27E+04
L4	-3.13E+04	4.14E+04	-2.70E+04	4.08E+04
NF	—	—	—	—
NS	-4.00E+04	3.39E+04	-2.62E+04	3.16E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.3
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–195. Time history of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–389. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	9.74	5.24E+04	-136	136.	163
A2	70.9	5.01E+04	-137	2.40E+03	-36
FD	25.8	5.13E+04	-140	4.82E+03	-7
L1	9.86E+03	5.47E+04	-130	2.67E+03	132
L3	9.91E+03	4.79E+04	-127	2.47E+03	17
L4	2.67E+03	4.49E+04	-123	4.69E+03	-5
NF	—	—	—	—	—
NS	-2.03E+03	3.89E+04	-123	4.99E+03	42

Table G–390. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-5.26E+04	5.24E+04	-5.14E+04	5.11E+04
A2	-4.93E+04	5.51E+04	-4.78E+04	5.21E+04
FD	-4.71E+04	5.58E+04	-4.65E+04	5.43E+04
L1	-4.64E+04	6.33E+04	-4.59E+04	6.29E+04
L3	-3.50E+04	5.79E+04	-3.47E+04	5.76E+04
L4	-4.26E+04	5.26E+04	-3.72E+04	5.18E+04
NF	—	—	—	—
NS	-6.38E+04	4.21E+04	-4.05E+04	4.14E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 135; Fn=0.3
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–196. Time history of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–391. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$,
$F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	14.6	7.85E+04	-136	203.	163
A2	182.	7.33E+04	-135	7.25E+03	-11
FD	27.2	7.45E+04	-140	5.18E+03	-2
L1	2.22E+04	8.20E+04	-130	6.00E+03	132
L3	2.22E+04	6.68E+04	-127	3.67E+03	87
L4	-8.82E+03	6.96E+04	-129	6.63E+03	-34
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–392. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/10$,
$\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-7.90E+04	7.86E+04	-7.72E+04	7.66E+04
A2	-6.62E+04	8.01E+04	-6.51E+04	7.50E+04
FD	-6.94E+04	7.95E+04	-6.85E+04	7.74E+04
L1	-6.36E+04	1.02E+05	-6.28E+04	1.01E+05
L3	-4.30E+04	8.75E+04	-4.25E+04	8.71E+04
L4	-9.09E+04	1.52E+05	-7.18E+04	6.96E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 180; Fn=0.3
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–197. Time history of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–393. Coefficients of the Fourier fit $a_0 + a_1 \sin (\omega t + \Phi_1) + a_2 \sin (2\omega t + \Phi_2) +$ $\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-8.94E-04	0.119	108	1.71E-03	-60
A2	-9.28E-04	9.78E-02	92	1.89E-03	-64
FD	4.54E-05	2.04E-03	38	2.53E-04	-143
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-4.03E-04	8.80E-04	-33	8.01E-04	26

Table G–394. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.121	0.116	-0.117	0.113
A2	-9.99E-02	9.53E-02	-9.66E-02	9.25E-02
FD	-3.39E-03	3.89E-03	-2.57E-03	2.46E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-9.51E-02	0.112	-5.11E-03	3.27E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3 and LAMP-4.

Figure G–198. Time history of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–395. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$,
$F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-2.69E-03	0.357	108	5.16E-03	-60
A2	56.0	125.	14	160.	-60
FD	-9.03E-05	6.27E-03	41	6.36E-04	-143
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	-5.55E-12	3.29E-11	56	2.79E-11	-26
NS	-8.21E-04	5.87E-03	-78	5.18E-03	-124

Table G–396. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/20$,
$\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.363	0.349	-0.352	0.339
A2	-0.300	7.17E+03	-82.2	956.
FD	-1.03E-02	1.02E-02	-7.94E-03	6.81E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	-7.42E-11	9.10E-11	-5.49E-11	6.55E-11
NS	-7.19E-02	0.111	-2.84E-02	1.22E-02

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3 and LAMP-4.

Figure G–199. Time history of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–397. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-3.59E-03	0.477	108	6.89E-03	-60
A2	14.5	26.7	106	26.9	133
FD	-4.86E-05	8.55E-03	40	1.17E-03	-120
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	3.50E-11	5.35E-11	-124	3.12E-11	84
NS	-5.26E-04	5.13E-03	-122	2.20E-03	51

Table G–398. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.484	0.467	-0.469	0.453
A2	-0.399	759.	-8.43	102.
FD	-1.35E-02	1.57E-02	-1.04E-02	1.04E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	-1.61E-10	1.57E-10	-1.18E-10	1.01E-10
NS	-0.504	0.470	-2.77E-02	1.63E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 180; Fn=0.3
fptot_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NSHIPMO.

Figure G–200. Time history of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–399. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-5.38E-03	0.716	108	1.03E-02	-60
A2	3.97	12.6	-148	16.8	-11
FD	8.97E-04	1.15E-02	28	2.16E-03	-132
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	3.73E-11	2.71E-11	-26	2.66E-11	-59
NS	—	—	—	—	—

Table G–400. Minimum and maximum of of M_x^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.726	0.700	-0.704	0.679
A2	-200.	475.	-31.7	64.4
FD	-2.05E-02	2.68E-02	-1.65E-02	1.61E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	-3.78E-10	3.04E-10	-2.82E-10	1.99E-10
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 0; Fn=0.0
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–201. Time history of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–401. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-668.	4.17E+05	124	444.	36
A2	3.33E+04	3.93E+05	119	1.71E+04	-166
FD	2.11E+04	4.46E+05	118	1.80E+04	-142
L1	-4.94E+03	3.84E+05	115	885.	68
L3	5.87E+03	3.50E+05	113	1.59E+04	-124
L4	3.14E+03	3.76E+05	113	1.12E+04	-53
NF	—	—	—	—	—
NS	-7.84E+04	4.08E+05	110	1.12E+03	154

Table G–402. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.17E+05	4.16E+05	-4.13E+05	4.11E+05
A2	-3.44E+05	4.29E+05	-3.41E+05	4.26E+05
FD	-4.24E+05	4.74E+05	-4.20E+05	4.70E+05
L1	-3.89E+05	3.79E+05	-3.87E+05	3.78E+05
L3	-3.56E+05	3.59E+05	-3.55E+05	3.57E+05
L4	-4.00E+05	3.73E+05	-3.96E+05	3.72E+05
NF	—	—	—	—
NS	-4.88E+05	3.33E+05	-4.83E+05	3.29E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta =   0; Fn=0.0
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–202. Time history of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–403. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-2.01E+03	1.25E+06	124	1.34E+03	36
A2	1.67E+05	9.24E+05	115	9.39E+04	-178
FD	1.43E+05	1.18E+06	116	1.25E+05	-167
L1	-4.22E+04	1.15E+06	115	7.59E+03	55
L3	6.92E+04	8.16E+05	109	9.87E+04	-158
L4	7.52E+04	1.03E+06	107	5.79E+04	-101
NF	—	—	—	—	—
NS	-8.93E+04	1.16E+06	109	3.57E+04	-128

Table G–404. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.26E+06	1.25E+06	-1.24E+06	1.24E+06
A2	-7.34E+05	1.19E+06	-7.00E+05	1.16E+06
FD	-9.48E+05	1.38E+06	-9.44E+05	1.37E+06
L1	-1.19E+06	1.11E+06	-1.19E+06	1.11E+06
L3	-7.75E+05	9.20E+05	-7.66E+05	9.17E+05
L4	-1.11E+06	1.09E+06	-1.10E+06	1.08E+06
NF	—	—	—	—
NS	-1.34E+06	1.09E+06	-1.34E+06	1.08E+06

Data identically zero, insufficient, or not available from NFA.

Figure G–203. Time history of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–405. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-2.68E+03	1.67E+06	124	1.78E+03	36
A2	2.67E+05	1.14E+06	118	1.47E+05	-177
FD	2.37E+05	1.47E+06	117	1.82E+05	-178
L1	-7.45E+04	1.54E+06	115	1.35E+04	53
L3	1.10E+05	9.25E+05	110	1.35E+05	-171
L4	1.56E+05	1.32E+06	105	6.17E+04	-135
NF	—	—	—	—	—
NS	-1.95E+05	1.38E+06	102	3.87E+04	-167

Table G–406. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.68E+06	1.67E+06	-1.66E+06	1.65E+06
A2	-7.71E+05	1.52E+06	-7.41E+05	1.50E+06
FD	-1.08E+06	1.82E+06	-1.07E+06	1.81E+06
L1	-1.61E+06	1.46E+06	-1.60E+06	1.46E+06
L3	-7.90E+05	1.10E+06	-7.82E+05	1.10E+06
L4	-1.29E+06	1.52E+06	-1.28E+06	1.49E+06
NF	—	—	—	—
NS	-1.60E+06	1.21E+06	-1.60E+06	1.19E+06

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 0; Fn=0.0
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–204. Time history of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–407. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-4.02E+03	2.51E+06	124	2.67E+03	36
A2	4.59E+05	1.40E+06	125	2.77E+05	-168
FD	4.01E+05	1.82E+06	123	2.25E+05	-175
L1	-1.67E+05	2.30E+06	115	3.02E+04	51
L3	1.30E+05	8.61E+05	119	1.33E+05	-171
L4	2.95E+05	1.66E+06	104	4.99E+04	171
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–408. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.51E+06	2.50E+06	-2.49E+06	2.48E+06
A2	-7.20E+05	2.27E+06	-6.73E+05	2.15E+06
FD	-1.24E+06	2.38E+06	-1.22E+06	2.36E+06
L1	-2.47E+06	2.14E+06	-2.46E+06	2.13E+06
L3	-6.32E+05	1.07E+06	-6.30E+05	1.07E+06
L4	-1.48E+06	2.20E+06	-1.46E+06	2.13E+06
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 45; Fn=0.0
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–205. Time history of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–409. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-711.	4.95E+05	110	673.	37
A2	3.34E+04	4.54E+05	104	2.34E+04	126
FD	2.14E+04	5.31E+05	107	1.68E+04	121
L1	-1.93E+03	4.56E+05	101	3.20E+03	154
L3	9.03E+03	4.10E+05	101	2.35E+04	146
L4	6.90E+03	4.37E+05	101	1.37E+04	-151
NF	—	—	—	—	—
NS	-7.83E+04	4.39E+05	106	3.74E+03	-3

Table G–410. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.96E+05	4.94E+05	-4.91E+05	4.89E+05
A2	-4.05E+05	5.06E+05	-3.97E+05	5.00E+05
FD	-4.88E+05	5.62E+05	-4.83E+05	5.57E+05
L1	-4.56E+05	4.57E+05	-4.54E+05	4.55E+05
L3	-3.76E+05	4.32E+05	-3.75E+05	4.30E+05
L4	-4.33E+05	4.45E+05	-4.30E+05	4.42E+05
NF	—	—	—	—
NS	-5.19E+05	3.57E+05	-5.15E+05	3.53E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 45; Fn=0.0
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–206. Time history of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–411. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-2.14E+03	1.49E+06	110	2.02E+03	37
A2	1.68E+05	1.08E+06	106	1.12E+05	90
FD	1.41E+05	1.40E+06	109	1.32E+05	109
L1	-1.60E+04	1.37E+06	101	2.68E+04	152
L3	9.25E+04	9.42E+05	103	1.58E+05	131
L4	1.02E+05	1.13E+06	101	9.48E+04	177
NF	—	—	—	—	—
NS	-8.66E+04	1.22E+06	107	4.41E+03	78

Table G–412. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.49E+06	1.49E+06	-1.48E+06	1.47E+06
A2	-8.35E+05	1.32E+06	-8.23E+05	1.30E+06
FD	-1.15E+06	1.63E+06	-1.14E+06	1.62E+06
L1	-1.36E+06	1.37E+06	-1.36E+06	1.37E+06
L3	-6.81E+05	1.15E+06	-6.79E+05	1.15E+06
L4	-9.85E+05	1.29E+06	-9.70E+05	1.28E+06
NF	—	—	—	—
NS	-1.27E+06	1.19E+06	-1.25E+06	1.11E+06

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 45; Fn=0.0
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–207. Time history of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–413. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$,
$F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-2.86E+03	1.99E+06	110	2.70E+03	37
A2	2.67E+05	1.32E+06	110	1.85E+05	88
FD	2.33E+05	1.76E+06	111	1.95E+05	98
L1	-2.81E+04	1.82E+06	101	4.72E+04	152
L3	1.52E+05	1.08E+06	106	2.17E+05	124
L4	1.91E+05	1.41E+06	103	1.34E+05	160
NF	—	—	—	—	—
NS	-1.81E+05	1.36E+06	105	2.01E+04	30

Table G–414. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/15$,
$\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.99E+06	1.98E+06	-1.97E+06	1.96E+06
A2	-1.01E+06	1.73E+06	-9.92E+05	1.72E+06
FD	-1.41E+06	2.13E+06	-1.40E+06	2.11E+06
L1	-1.82E+06	1.83E+06	-1.81E+06	1.83E+06
L3	-7.24E+05	1.41E+06	-7.22E+05	1.40E+06
L4	-1.14E+06	1.77E+06	-1.12E+06	1.73E+06
NF	—	—	—	—
NS	-1.51E+06	1.18E+06	-1.49E+06	1.15E+06

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 45; Fn=0.0
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–208. Time history of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–415. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-4.29E+03	2.98E+06	110	4.06E+03	37
A2	3.84E+05	1.52E+06	119	1.48E+05	40
FD	3.95E+05	2.25E+06	116	2.52E+05	61
L1	-6.25E+04	2.74E+06	101	1.05E+05	152
L3	2.31E+05	1.09E+06	117	2.33E+05	108
L4	3.81E+05	1.77E+06	105	1.89E+05	97
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–416. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.99E+06	2.98E+06	-2.96E+06	2.95E+06
A2	-1.25E+06	2.00E+06	-1.23E+06	1.96E+06
FD	-1.89E+06	2.69E+06	-1.87E+06	2.67E+06
L1	-2.72E+06	2.76E+06	-2.71E+06	2.75E+06
L3	-7.84E+05	1.51E+06	-7.80E+05	1.50E+06
L4	-1.39E+06	2.98E+06	-1.30E+06	2.61E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–209. Time history of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–417. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	203.	1.61E+05	25	271.	58
A2	3.44E+04	1.31E+05	27	2.47E+04	-104
FD	2.17E+04	1.49E+05	36	1.58E+04	-108
L1	-1.49E+03	1.37E+05	15	843.	174
L3	9.62E+03	1.09E+05	22	1.17E+04	-99
L4	8.01E+03	1.20E+05	15	6.82E+03	-7
NF	—	—	—	—	—
NS	-7.78E+04	6.25E+04	57	2.45E+03	-80

Table G–418. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.61E+05	1.62E+05	-1.60E+05	1.60E+05
A2	-1.10E+05	1.76E+05	-1.06E+05	1.76E+05
FD	-1.36E+05	1.75E+05	-1.34E+05	1.73E+05
L1	-1.39E+05	1.35E+05	-1.39E+05	1.35E+05
L3	-9.90E+04	1.24E+05	-9.84E+04	1.24E+05
L4	-1.07E+05	1.31E+05	-1.05E+05	1.30E+05
NF	—	—	—	—
NS	-1.44E+05	-1.18E+04	-1.40E+05	-1.79E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.0
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–210. Time history of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–419. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$
$\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$,
$F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	610.	4.83E+05	25	814.	58
A2	1.75E+05	3.27E+05	35	1.31E+05	-104
FD	1.44E+05	3.60E+05	52	1.20E+05	-107
L1	-1.30E+04	4.12E+05	15	8.13E+03	172
L3	9.77E+04	1.81E+05	51	9.45E+04	-100
L4	9.97E+04	2.27E+05	16	4.89E+04	-32
NF	—	—	—	—	—
NS	-8.54E+04	1.70E+05	58	2.81E+04	-41

Table G–420. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/20$,
$\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.85E+05	4.88E+05	-4.80E+05	4.82E+05
A2	-2.56E+05	5.69E+05	-2.39E+05	5.60E+05
FD	-3.39E+05	5.16E+05	-3.27E+05	5.11E+05
L1	-4.30E+05	3.94E+05	-4.29E+05	3.92E+05
L3	-2.02E+05	3.03E+05	-1.97E+05	3.02E+05
L4	-1.67E+05	3.82E+05	-1.34E+05	3.55E+05
NF	—	—	—	—
NS	-2.95E+05	1.85E+05	-2.63E+05	1.32E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.0
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–211. Time history of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–421. Coefficients of the Fourier fit $a_0+a_1 \sin\left(\omega t + \Phi_1\right)+a_2 \sin\left(2\omega t + \Phi_2\right)+ \cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	815.	6.45E+05	25	1.09E+03	58
A2	2.75E+05	4.02E+05	40	2.18E+05	-105
FD	2.39E+05	4.47E+05	61	2.01E+05	-107
L1	-2.30E+04	5.49E+05	15	1.46E+04	171
L3	1.60E+05	2.03E+05	74	1.52E+05	-101
L4	1.64E+05	2.38E+05	16	7.82E+04	-34
NF	—	—	—	—	—
NS	-1.68E+05	1.06E+05	109	2.39E+04	-76

Table G–422. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-6.48E+05	6.51E+05	-6.41E+05	6.43E+05
A2	-3.21E+05	8.03E+05	-2.93E+05	7.77E+05
FD	-4.29E+05	6.86E+05	-4.11E+05	6.79E+05
L1	-5.82E+05	5.17E+05	-5.80E+05	5.15E+05
L3	-2.46E+05	3.63E+05	-2.40E+05	3.62E+05
L4	-1.85E+05	4.75E+05	-1.38E+05	4.55E+05
NF	—	—	—	—
NS	-3.74E+05	4.77E+05	-3.51E+05	5.09E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.0
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–212. Time history of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–423. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.22E+03	9.68E+05	25	1.63E+03	58
A2	3.80E+05	4.63E+05	73	1.90E+05	-97
FD	4.03E+05	6.32E+05	72	2.89E+05	-106
L1	-5.16E+04	8.24E+05	15	3.31E+04	171
L3	2.42E+05	3.17E+05	106	1.94E+05	-104
L4	3.27E+05	4.61E+05	5	1.54E+05	-100
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–424. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-9.72E+05	9.77E+05	-9.62E+05	9.65E+05
A2	-4.21E+05	1.03E+06	-3.76E+05	9.78E+05
FD	-5.99E+05	1.02E+06	-5.70E+05	1.00E+06
L1	-8.98E+05	7.53E+05	-8.95E+05	7.50E+05
L3	-3.37E+05	6.55E+05	-3.28E+05	6.51E+05
L4	-3.97E+05	2.47E+06	-1.74E+05	1.47E+06
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.0
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–213. Time history of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–425. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	846.	4.66E+05	-73	602.	-165
A2	3.51E+04	4.39E+05	-75	2.31E+04	10
FD	2.21E+04	5.39E+05	-76	1.55E+04	30
L1	-3.22E+03	4.15E+05	-87	3.52E+03	-33
L3	7.74E+03	3.73E+05	-83	2.19E+04	8
L4	-3.69E+03	4.09E+05	-85	3.07E+03	104
NF	—	—	—	—	—
NS	-7.69E+04	4.34E+05	-69	4.45E+03	145

Table G–426. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-4.64E+05	4.66E+05	-4.59E+05	4.62E+05
A2	-4.22E+05	4.84E+05	-4.17E+05	4.79E+05
FD	-5.26E+05	5.65E+05	-5.20E+05	5.60E+05
L1	-4.21E+05	4.10E+05	-4.19E+05	4.08E+05
L3	-3.74E+05	3.80E+05	-3.73E+05	3.79E+05
L4	-4.14E+05	4.11E+05	-4.11E+05	4.05E+05
NF	—	—	—	—
NS	-5.07E+05	3.64E+05	-5.02E+05	3.59E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–214. Time history of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–427. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.54E+03	1.40E+06	-73	1.81E+03	-165
A2	1.73E+05	1.09E+06	-67	1.17E+05	57
FD	1.45E+05	1.45E+06	-72	1.20E+05	39
L1	-3.16E+04	1.24E+06	-87	3.07E+04	-31
L3	7.72E+04	8.55E+05	-77	1.45E+05	21
L4	-1.47E+04	1.14E+06	-81	3.41E+04	41
NF	—	—	—	—	—
NS	-8.36E+04	1.20E+06	-69	4.96E+04	157

Table G–428. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.40E+06	1.40E+06	-1.38E+06	1.39E+06
A2	-1.00E+06	1.31E+06	-9.68E+05	1.30E+06
FD	-1.37E+06	1.62E+06	-1.35E+06	1.61E+06
L1	-1.30E+06	1.20E+06	-1.29E+06	1.19E+06
L3	-8.73E+05	9.28E+05	-8.63E+05	9.26E+05
L4	-1.18E+06	1.15E+06	-1.17E+06	1.13E+06
NF	—	—	—	—
NS	-1.24E+06	1.18E+06	-1.23E+06	1.14E+06

Data identically zero, insufficient, or not available from NFA.

Figure G–215. Time history of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–429. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	3.40E+03	1.87E+06	-73	2.42E+03	-165
A2	2.70E+05	1.32E+06	-64	2.00E+05	62
FD	2.39E+05	1.83E+06	-70	1.77E+05	49
L1	-5.69E+04	1.66E+06	-87	5.43E+04	-30
L3	1.24E+05	9.66E+05	-73	1.96E+05	26
L4	-3.24E+04	1.42E+06	-77	6.24E+04	52
NF	—	—	—	—	—
NS	-1.79E+05	1.34E+06	-67	4.51E+04	167

Table G–430. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.86E+06	1.87E+06	-1.84E+06	1.86E+06
A2	-1.21E+06	1.65E+06	-1.15E+06	1.63E+06
FD	-1.64E+06	2.13E+06	-1.62E+06	2.10E+06
L1	-1.75E+06	1.57E+06	-1.75E+06	1.57E+06
L3	-9.85E+05	1.07E+06	-9.71E+05	1.07E+06
L4	-1.50E+06	1.45E+06	-1.48E+06	1.42E+06
NF	—	—	—	—
NS	-1.46E+06	1.21E+06	-1.46E+06	1.18E+06

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 135; Fn=0.0
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–216. Time history of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–431. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	5.10E+03	2.80E+06	-73	3.63E+03	-165
A2	3.76E+05	1.57E+06	-53	1.43E+05	98
FD	4.04E+05	2.35E+06	-65	2.26E+05	88
L1	-1.29E+05	2.49E+06	-87	1.22E+05	-30
L3	1.62E+05	9.31E+05	-60	1.73E+05	33
L4	4.31E+04	1.78E+06	-76	1.98E+05	122
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–432. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.79E+06	2.81E+06	-2.77E+06	2.78E+06
A2	-1.35E+06	2.27E+06	-1.31E+06	2.20E+06
FD	-1.91E+06	2.96E+06	-1.87E+06	2.93E+06
L1	-2.70E+06	2.30E+06	-2.69E+06	2.29E+06
L3	-9.81E+05	1.08E+06	-9.68E+05	1.08E+06
L4	-1.80E+06	2.63E+06	-1.78E+06	2.37E+06
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 180; Fn=0.0
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–217. Time history of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–433. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	642.	3.96E+05	-83	572.	-165
A2	3.46E+04	3.87E+05	-82	1.85E+04	-46
FD	2.10E+04	5.14E+05	-85	1.80E+04	-66
L1	-1.57E+03	3.46E+05	-99	724.	-125
L3	9.01E+03	3.25E+05	-92	1.71E+04	-71
L4	-998.	3.52E+05	-97	7.29E+03	164
NF	—	—	—	—	—
NS	-7.71E+04	4.43E+05	-74	2.68E+03	33

Table G–434. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.94E+05	3.99E+05	-3.91E+05	3.93E+05
A2	-3.72E+05	4.22E+05	-3.69E+05	4.15E+05
FD	-5.11E+05	5.21E+05	-5.05E+05	5.16E+05
L1	-3.48E+05	3.44E+05	-3.49E+05	3.43E+05
L3	-3.39E+05	3.25E+05	-3.38E+05	3.24E+05
L4	-3.49E+05	3.50E+05	-3.44E+05	3.46E+05
NF	—	—	—	—
NS	-5.18E+05	3.65E+05	-5.14E+05	3.59E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–218. Time history of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–435. Coefficients of the Fourier fit $a_0+a_1 \sin (\omega t + \Phi_1)+a_2 \sin (2\omega t + \Phi_2)+$
$\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$,
$F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.93E+03	1.19E+06	-83	1.72E+03	-165
A2	1.73E+05	1.02E+06	-74	9.70E+04	-37
FD	1.43E+05	1.46E+06	-79	1.19E+05	-41
L1	-1.56E+04	1.04E+06	-99	5.67E+03	-140
L3	9.64E+04	7.97E+05	-81	9.86E+04	-40
L4	8.33E+03	1.07E+06	-91	3.61E+04	-135
NF	—	—	—	—	—
NS	-8.78E+04	1.26E+06	-75	3.06E+04	49

Table G–436. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/20$,
$\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.19E+06	1.20E+06	-1.18E+06	1.18E+06
A2	-9.66E+05	1.14E+06	-9.43E+05	1.11E+06
FD	-1.50E+06	1.52E+06	-1.47E+06	1.51E+06
L1	-1.06E+06	1.02E+06	-1.06E+06	1.01E+06
L3	-8.79E+05	8.49E+05	-8.66E+05	8.45E+05
L4	-1.20E+06	1.20E+06	-1.17E+06	1.10E+06
NF	—	—	—	—
NS	-1.32E+06	1.16E+06	-1.29E+06	1.14E+06

Data identically zero, insufficient, or not available from NFA.

Figure G–219. Time history of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–437. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.58E+03	1.59E+06	-83	2.30E+03	-165
A2	2.72E+05	1.26E+06	-72	1.49E+05	-34
FD	2.38E+05	1.87E+06	-77	1.74E+05	-31
L1	-2.81E+04	1.38E+06	-99	9.96E+03	-142
L3	1.57E+05	9.27E+05	-76	1.33E+05	-30
L4	1.96E+04	1.39E+06	-87	4.06E+04	-97
NF	—	—	—	—	—
NS	-1.95E+05	1.48E+06	-69	3.57E+04	61

Table G–438. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.58E+06	1.60E+06	-1.57E+06	1.58E+06
A2	-1.18E+06	1.42E+06	-1.15E+06	1.39E+06
FD	-1.87E+06	1.99E+06	-1.83E+06	1.98E+06
L1	-1.42E+06	1.35E+06	-1.42E+06	1.34E+06
L3	-9.72E+05	1.02E+06	-9.63E+05	1.02E+06
L4	-1.52E+06	1.62E+06	-1.46E+06	1.46E+06
NF	—	—	—	—
NS	-1.65E+06	1.28E+06	-1.62E+06	1.27E+06

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 180; Fn=0.0
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–220. Time history of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–439. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	3.87E+03	2.38E+06	-83	3.45E+03	-165
A2	4.63E+05	1.57E+06	-64	2.81E+05	-44
FD	4.02E+05	2.45E+06	-72	2.16E+05	-35
L1	-6.40E+04	2.08E+06	-99	2.22E+04	-144
L3	2.32E+05	9.44E+05	-60	1.42E+05	-38
L4	8.70E+04	1.70E+06	-87	1.17E+05	-98
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–440. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.38E+06	2.40E+06	-2.36E+06	2.37E+06
A2	-1.52E+06	1.89E+06	-1.45E+06	1.85E+06
FD	-2.31E+06	2.65E+06	-2.27E+06	2.63E+06
L1	-2.16E+06	1.99E+06	-2.16E+06	1.99E+06
L3	-9.08E+05	1.02E+06	-8.99E+05	1.02E+06
L4	-1.83E+06	2.18E+06	-1.78E+06	1.86E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–221. Time history of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–441. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	102.	2.85E+05	100	953.	-143
A2	3.41E+04	2.82E+05	90	1.84E+04	-159
FD	2.11E+04	2.33E+05	125	1.87E+04	-131
L1	-1.18E+04	4.39E+05	114	483.	-98
L3	-649.	4.05E+05	111	1.78E+04	-116
L4	-2.66E+04	4.54E+05	110	1.63E+04	36
NF	—	—	—	—	—
NS	-3.90E+04	2.83E+05	149	5.31E+03	-176

Table G–442. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.86E+05	2.90E+05	-2.85E+05	2.84E+05
A2	-2.61E+05	3.11E+05	-2.61E+05	3.11E+05
FD	-2.12E+05	2.62E+05	-2.12E+05	2.61E+05
L1	-4.51E+05	4.27E+05	-4.51E+05	4.27E+05
L3	-4.23E+05	4.03E+05	-4.23E+05	4.03E+05
L4	-5.05E+05	4.23E+05	-5.01E+05	4.21E+05
NF	—	—	—	—
NS	-3.34E+05	2.44E+05	-3.28E+05	2.41E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.3
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–222. Time history of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–443. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	308.	8.57E+05	100	2.87E+03	-143
A2	1.70E+05	6.61E+05	82	9.91E+04	-163
FD	1.43E+05	5.34E+05	122	1.22E+05	-159
L1	-1.86E+04	1.32E+06	114	5.41E+03	-70
L3	9.44E+04	9.87E+05	107	1.10E+05	-145
L4	4.33E+04	1.27E+06	107	4.18E+04	-107
NF	—	—	—	—	—
NS	-1.19E+05	8.48E+05	137	1.07E+05	-111

Table G–444. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-8.60E+05	8.73E+05	-8.57E+05	8.56E+05
A2	-6.47E+05	8.34E+05	-6.32E+05	8.26E+05
FD	-4.15E+05	7.48E+05	-4.13E+05	7.47E+05
L1	-1.34E+06	1.29E+06	-1.34E+06	1.29E+06
L3	-9.58E+05	1.10E+06	-9.58E+05	1.10E+06
L4	-1.31E+06	1.29E+06	-1.31E+06	1.29E+06
NF	—	—	—	—
NS	-9.85E+05	7.32E+05	-9.76E+05	7.25E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–223. Time history of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–445. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	410.	1.14E+06	100	3.83E+03	-143
A2	2.69E+05	7.73E+05	80	1.52E+05	-163
FD	2.37E+05	6.11E+05	124	1.77E+05	-168
L1	-2.43E+04	1.76E+06	114	9.98E+03	-68
L3	1.62E+05	1.15E+06	107	1.47E+05	-156
L4	1.25E+05	1.62E+06	106	1.08E+05	-131
NF	—	—	—	—	—
NS	-1.96E+05	1.08E+06	127	1.20E+05	-148

Table G–446. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.15E+06	1.17E+06	-1.14E+06	1.14E+06
A2	-7.13E+05	1.03E+06	-6.87E+05	1.01E+06
FD	-3.49E+05	9.75E+05	-3.48E+05	9.74E+05
L1	-1.79E+06	1.72E+06	-1.79E+06	1.72E+06
L3	-1.02E+06	1.35E+06	-1.02E+06	1.35E+06
L4	-1.57E+06	1.72E+06	-1.55E+06	1.71E+06
NF	—	—	—	—
NS	-1.22E+06	8.77E+05	-1.20E+06	8.68E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 0; Fn=0.3
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–224. Time history of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–447. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	616.	1.72E+06	100	5.74E+03	-143
A2	4.56E+05	8.06E+05	74	2.77E+05	-154
FD	4.01E+05	5.64E+05	145	2.20E+05	-164
L1	-4.02E+04	2.63E+06	114	2.33E+04	-65
L3	2.58E+05	1.18E+06	110	1.62E+05	-147
L4	3.04E+05	2.06E+06	106	1.64E+05	-155
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–448. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.72E+06	1.75E+06	-1.72E+06	1.71E+06
A2	-7.57E+05	1.19E+06	-7.19E+05	1.14E+06
FD	-9.89E+03	1.14E+06	-9.02E+03	1.13E+06
L1	-2.70E+06	2.57E+06	-2.70E+06	2.57E+06
L3	-9.45E+05	1.48E+06	-9.42E+05	1.48E+06
L4	-1.83E+06	3.08E+06	-1.80E+06	2.66E+06
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 45; Fn=0.3
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–225. Time history of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–449. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.27E+03	4.70E+05	122	888.	-160
A2	3.50E+04	4.34E+05	119	2.44E+04	144
FD	2.13E+04	3.90E+05	129	1.57E+04	143
L1	-1.25E+04	4.97E+05	114	3.62E+03	-155
L3	-1.33E+03	4.51E+05	114	2.14E+04	164
L4	-3.00E+04	4.75E+05	111	1.57E+04	-91
NF	—	—	—	—	—
NS	1.59E+04	4.55E+05	131	5.24E+03	166

Table G–450. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.81E+05	4.77E+05	-4.70E+05	4.75E+05
A2	-3.74E+05	4.88E+05	-3.73E+05	4.87E+05
FD	-3.50E+05	4.21E+05	-3.49E+05	4.20E+05
L1	-5.08E+05	4.86E+05	-5.08E+05	4.86E+05
L3	-4.25E+05	4.62E+05	-4.25E+05	4.62E+05
L4	-5.11E+05	4.40E+05	-5.04E+05	4.40E+05
NF	—	—	—	—
NS	-4.26E+05	4.77E+05	-4.22E+05	4.71E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–226. Time history of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–451. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	3.82E+03	1.42E+06	122	2.67E+03	-160
A2	1.76E+05	1.03E+06	124	1.10E+05	109
FD	1.41E+05	9.89E+05	134	1.24E+05	134
L1	-2.70E+04	1.49E+06	114	3.22E+04	-156
L3	8.44E+04	1.07E+06	118	1.42E+05	153
L4	1.33E+04	1.29E+06	110	9.77E+04	-163
NF	—	—	—	—	—
NS	-6.89E+04	1.10E+06	127	5.01E+04	122

Table G–452. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.45E+06	1.43E+06	-1.41E+06	1.43E+06
A2	-8.66E+05	1.28E+06	-8.28E+05	1.28E+06
FD	-7.95E+05	1.22E+06	-8.01E+05	1.22E+06
L1	-1.51E+06	1.48E+06	-1.51E+06	1.48E+06
L3	-8.43E+05	1.28E+06	-8.42E+05	1.28E+06
L4	-1.25E+06	1.32E+06	-1.18E+06	1.32E+06
NF	—	—	—	—
NS	-1.13E+06	1.07E+06	-1.10E+06	1.04E+06

Data identically zero, insufficient, or not available from NFA.

Figure G–227. Time history of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–453. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	5.10E+03	1.89E+06	122	3.57E+03	-160
A2	2.76E+05	1.27E+06	128	1.86E+05	105
FD	2.35E+05	1.23E+06	137	1.83E+05	124
L1	-3.98E+04	1.99E+06	114	5.71E+04	-156
L3	1.44E+05	1.27E+06	122	1.91E+05	148
L4	7.80E+04	1.64E+06	110	1.59E+05	-172
NF	—	—	—	—	—
NS	-6.29E+04	1.39E+06	128	8.56E+04	126

Table G–454. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.93E+06	1.91E+06	-1.89E+06	1.91E+06
A2	-1.04E+06	1.72E+06	-1.02E+06	1.68E+06
FD	-9.79E+05	1.59E+06	-9.77E+05	1.58E+06
L1	-2.01E+06	1.97E+06	-2.01E+06	1.97E+06
L3	-9.58E+05	1.59E+06	-9.58E+05	1.59E+06
L4	-1.51E+06	1.76E+06	-1.39E+06	1.75E+06
NF	—	—	—	—
NS	-1.40E+06	1.42E+06	-1.35E+06	1.36E+06

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 45; Fn=0.3
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–228. Time history of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–455. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	7.66E+03	2.83E+06	122	5.35E+03	-160
A2	3.83E+05	1.52E+06	141	1.33E+05	55
FD	3.99E+05	1.53E+06	149	2.39E+05	85
L1	-7.63E+04	2.98E+06	114	1.28E+05	-156
L3	2.20E+05	1.42E+06	133	1.67E+05	142
L4	3.17E+05	2.22E+06	110	3.47E+05	129
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–456. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.90E+06	2.87E+06	-2.83E+06	2.86E+06
A2	-1.32E+06	2.10E+06	-1.31E+06	2.07E+06
FD	-1.32E+06	1.95E+06	-1.31E+06	1.95E+06
L1	-3.02E+06	2.96E+06	-3.02E+06	2.96E+06
L3	-1.13E+06	1.86E+06	-1.13E+06	1.86E+06
L4	-1.89E+06	5.89E+06	-1.67E+06	3.39E+06
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.3
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–229. Time history of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–457. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	561.	1.16E+05	64	556.	-48
A2	3.48E+04	9.68E+04	76	2.53E+04	-103
FD	2.17E+04	1.23E+05	21	1.58E+04	-108
L1	-1.48E+04	8.80E+04	29	4.68E+03	59
L3	-3.71E+03	6.61E+04	47	7.69E+03	-80
L4	-3.76E+04	4.77E+04	9	1.25E+04	49
NF	—	—	—	—	—
NS	-7.26E+04	2.60E+04	79	2.39E+03	-33

Table G–458. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.14E+05	1.19E+05	-1.13E+05	1.18E+05
A2	-9.30E+04	1.29E+05	-8.88E+04	1.25E+05
FD	-1.00E+05	1.53E+05	-9.87E+04	1.51E+05
L1	-1.03E+05	7.35E+04	-1.03E+05	7.31E+04
L3	-7.87E+04	6.72E+04	-7.81E+04	6.68E+04
L4	-1.12E+05	1.62E+04	-1.08E+05	1.51E+04
NF	—	—	—	—
NS	-1.06E+05	-3.85E+04	-1.02E+05	-4.39E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.3
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–230. Time history of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–459. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.69E+03	3.48E+05	64	1.67E+03	-48
A2	1.76E+05	2.94E+05	93	1.33E+05	-104
FD	1.44E+05	2.54E+05	37	1.20E+05	-107
L1	-4.76E+04	2.64E+05	29	4.21E+04	60
L3	6.32E+04	1.69E+05	108	5.91E+04	-78
L4	-3.83E+04	9.15E+04	23	6.80E+04	-47
NF	—	—	—	—	—
NS	-1.21E+05	3.06E+04	81	4.28E+04	-36

Table G–460. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.44E+05	3.59E+05	-3.41E+05	3.55E+05
A2	-2.38E+05	5.07E+05	-2.27E+05	4.54E+05
FD	-2.13E+05	4.50E+05	-2.02E+05	4.46E+05
L1	-3.25E+05	2.27E+05	-3.24E+05	2.26E+05
L3	-1.57E+05	2.34E+05	-1.55E+05	2.32E+05
L4	-3.01E+05	1.35E+05	-2.63E+05	1.29E+05
NF	—	—	—	—
NS	-2.96E+05	6.21E+04	-2.28E+05	4.16E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.3
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–231. Time history of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–461. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.25E+03	4.65E+05	64	2.23E+03	-48
A2	2.77E+05	4.07E+05	100	2.20E+05	-105
FD	2.39E+05	2.89E+05	49	2.01E+05	-107
L1	-7.62E+04	3.52E+05	29	7.49E+04	60
L3	1.07E+05	2.77E+05	127	8.95E+04	-75
L4	-6.85E+03	1.22E+05	40	1.16E+05	-54
NF	—	—	—	—	—
NS	-1.81E+05	1.18E+05	-167	2.19E+04	-45

Table G–462. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.60E+05	4.79E+05	-4.55E+05	4.74E+05
A2	-3.19E+05	7.28E+05	-2.99E+05	7.17E+05
FD	-2.58E+05	5.98E+05	-2.41E+05	5.92E+05
L1	-4.57E+05	3.00E+05	-4.55E+05	2.98E+05
L3	-1.96E+05	4.40E+05	-1.94E+05	4.37E+05
L4	-4.89E+05	2.33E+05	-4.18E+05	2.25E+05
NF	—	—	—	—
NS	-5.03E+05	3.98E+05	-3.08E+05	-2.70E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.3
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–232. Time history of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–463. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	3.38E+03	6.97E+05	64	3.35E+03	-48
A2	3.82E+05	7.83E+05	124	1.94E+05	-96
FD	4.03E+05	3.74E+05	65	2.89E+05	-106
L1	-1.58E+05	5.28E+05	29	1.68E+05	60
L3	1.36E+05	5.43E+05	141	8.63E+04	-34
L4	1.69E+05	4.50E+05	12	4.41E+05	-106
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–464. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-6.90E+05	7.19E+05	-6.83E+05	7.10E+05
A2	-5.04E+05	1.32E+06	-4.50E+05	1.30E+06
FD	-3.38E+05	8.64E+05	-3.10E+05	8.44E+05
L1	-7.69E+05	4.45E+05	-7.66E+05	4.41E+05
L3	-4.29E+05	6.84E+05	-4.23E+05	6.81E+05
L4	-2.74E+06	6.03E+06	-7.66E+05	2.28E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–233. Time history of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–465. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	92.8	5.23E+05	-75	1.61E+03	-149
A2	3.41E+04	4.89E+05	-79	2.23E+04	9
FD	2.15E+04	5.98E+05	-67	1.66E+04	47
L1	-1.39E+04	4.55E+05	-83	3.91E+03	-84
L3	-2.51E+03	4.16E+05	-79	1.91E+04	9
L4	-4.70E+04	4.28E+05	-80	2.01E+04	-172
NF	—	—	—	—	—
NS	-6.73E+04	4.77E+05	-76	3.95E+03	48

Table G–466. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-5.25E+05	5.25E+05	-5.12E+05	5.12E+05
A2	-4.73E+05	5.34E+05	-4.59E+05	5.21E+05
FD	-5.84E+05	6.23E+05	-5.68E+05	6.08E+05
L1	-4.72E+05	4.37E+05	-4.68E+05	4.33E+05
L3	-4.32E+05	4.10E+05	-4.28E+05	4.06E+05
L4	-4.87E+05	3.84E+05	-4.78E+05	3.80E+05
NF	—	—	—	—
NS	-5.46E+05	4.18E+05	-5.37E+05	4.08E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–234. Time history of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–467. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$,
$F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	279.	1.57E+06	-75	4.84E+03	-149
A2	1.71E+05	1.23E+06	-72	1.14E+05	57
FD	1.41E+05	1.63E+06	-63	1.29E+05	59
L1	-3.95E+04	1.36E+06	-83	3.53E+04	-84
L3	7.24E+04	9.92E+05	-72	1.13E+05	21
L4	-9.46E+04	1.16E+06	-77	5.86E+04	108
NF	—	—	—	—	—
NS	-9.80E+04	1.30E+06	-77	4.29E+04	110

Table G–468. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/20$,
$\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.58E+06	1.58E+06	-1.54E+06	1.54E+06
A2	-1.10E+06	1.46E+06	-1.04E+06	1.42E+06
FD	-1.53E+06	1.80E+06	-1.48E+06	1.75E+06
L1	-1.44E+06	1.29E+06	-1.43E+06	1.28E+06
L3	-1.01E+06	1.03E+06	-9.95E+05	1.03E+06
L4	-1.25E+06	1.12E+06	-1.25E+06	1.11E+06
NF	—	—	—	—
NS	-1.33E+06	1.28E+06	-1.32E+06	1.21E+06

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.3
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–235. Time history of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–469. Coefficients of the Fourier fit $a_0+a_1 \sin{(\omega t + \Phi_1)}+a_2 \sin{(2\omega t + \Phi_2)}+$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	373.	2.10E+06	-75	6.47E+03	-149
A2	2.69E+05	1.50E+06	-71	1.95E+05	62
FD	2.34E+05	2.06E+06	-62	1.90E+05	69
L1	-6.19E+04	1.82E+06	-83	6.28E+04	-84
L3	1.23E+05	1.16E+06	-69	1.38E+05	26
L4	-8.64E+04	1.43E+06	-74	9.89E+04	109
NF	—	—	—	—	—
NS	-1.25E+05	1.44E+06	-74	3.06E+04	62

Table G–470. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.11E+06	2.11E+06	-2.06E+06	2.06E+06
A2	-1.32E+06	1.85E+06	-1.22E+06	1.81E+06
FD	-1.84E+06	2.36E+06	-1.79E+06	2.30E+06
L1	-1.94E+06	1.70E+06	-1.93E+06	1.68E+06
L3	-1.15E+06	1.24E+06	-1.12E+06	1.23E+06
L4	-1.48E+06	1.41E+06	-1.47E+06	1.39E+06
NF	—	—	—	—
NS	-1.54E+06	1.35E+06	-1.50E+06	1.32E+06

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–236. Time history of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–471. Coefficients of the Fourier fit $a_0+a_1\sin\left(\omega t+\Phi_1\right)+a_2\sin\left(2\omega t+\Phi_2\right)+$
$\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$,
$F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	559.	3.15E+06	-75	9.70E+03	-149
A2	3.69E+05	1.79E+06	-63	1.49E+05	99
FD	3.99E+05	2.70E+06	-58	2.41E+05	105
L1	-1.26E+05	2.73E+06	-83	1.41E+05	-84
L3	1.72E+05	1.24E+06	-57	4.91E+04	33
L4	9.46E+03	1.73E+06	-75	1.58E+05	110
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–472. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/10$,
$\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.16E+06	3.16E+06	-3.09E+06	3.08E+06
A2	-1.46E+06	2.51E+06	-1.43E+06	2.36E+06
FD	-2.20E+06	3.31E+06	-2.14E+06	3.21E+06
L1	-2.99E+06	2.46E+06	-2.97E+06	2.44E+06
L3	-1.17E+06	1.45E+06	-1.15E+06	1.44E+06
L4	-1.59E+06	3.39E+06	-1.58E+06	2.13E+06
NF	—	—	—	—
NS	—	—	—	—

G–713

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 180; Fn=0.3
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–237. Time history of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–473. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-1.40E+03	4.98E+05	-92	622.	-112
A2	3.25E+04	4.78E+05	-95	1.91E+04	-57
FD	2.16E+04	5.51E+05	-116	1.84E+04	-129
L1	-1.15E+04	3.83E+05	-101	786.	-171
L3	-550.	3.71E+05	-94	1.67E+04	-96
L4	-5.02E+04	4.04E+05	-93	3.32E+04	90
NF	—	—	—	—	—
NS	-7.14E+04	4.65E+05	-84	2.48E+03	-113

Table G–474. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-5.01E+05	4.96E+05	-4.89E+05	4.80E+05
A2	-4.65E+05	5.09E+05	-4.51E+05	4.90E+05
FD	-5.49E+05	5.59E+05	-5.26E+05	5.43E+05
L1	-3.95E+05	3.71E+05	-3.91E+05	3.67E+05
L3	-3.92E+05	3.59E+05	-3.87E+05	3.55E+05
L4	-4.35E+05	4.04E+05	-4.26E+05	3.86E+05
NF	—	—	—	—
NS	-5.38E+05	3.96E+05	-5.31E+05	3.86E+05

Figure G–238. Time history of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–475. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-4.21E+03	1.50E+06	-92	1.87E+03	-112
A2	1.66E+05	1.28E+06	-89	1.02E+05	-50
FD	1.44E+05	1.57E+06	-111	1.23E+05	-101
L1	-2.25E+04	1.15E+06	-101	6.43E+03	162
L3	9.11E+04	9.67E+05	-83	9.31E+04	-64
L4	-1.02E+05	1.19E+06	-91	5.14E+04	76
NF	-2.60E+04	1.24E+06	1	3.60E+04	-111
NS	-9.05E+04	1.27E+06	-83	2.12E+04	8

Table G–476. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.51E+06	1.49E+06	-1.47E+06	1.45E+06
A2	-1.25E+06	1.40E+06	-1.17E+06	1.35E+06
FD	-1.61E+06	1.64E+06	-1.50E+06	1.59E+06
L1	-1.17E+06	1.13E+06	-1.16E+06	1.11E+06
L3	-1.05E+06	9.84E+05	-1.02E+06	9.77E+05
L4	-1.29E+06	1.36E+06	-1.21E+06	1.19E+06
NF	-1.24E+06	1.23E+06	-1.18E+06	1.21E+06
NS	-1.38E+06	1.16E+06	-1.34E+06	1.14E+06

Figure G–239. Time history of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–477. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-5.62E+03	2.00E+06	-92	2.50E+03	-112
A2	2.63E+05	1.59E+06	-88	1.52E+05	-46
FD	2.39E+05	2.01E+06	-109	1.79E+05	-90
L1	-3.26E+04	1.53E+06	-101	1.15E+04	158
L3	1.54E+05	1.17E+06	-78	1.26E+05	-52
L4	-9.04E+04	1.50E+06	-89	7.90E+04	63
NF	2.57E+04	1.56E+06	5	6.64E+04	-119
NS	-1.30E+05	1.47E+06	-77	3.42E+04	-2

Table G–478. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.01E+06	1.99E+06	-1.96E+06	1.93E+06
A2	-1.52E+06	1.77E+06	-1.42E+06	1.72E+06
FD	-1.99E+06	2.15E+06	-1.87E+06	2.09E+06
L1	-1.57E+06	1.50E+06	-1.55E+06	1.48E+06
L3	-1.22E+06	1.22E+06	-1.19E+06	1.21E+06
L4	-1.56E+06	1.80E+06	-1.51E+06	1.55E+06
NF	-1.49E+06	1.62E+06	-1.42E+06	1.57E+06
NS	-1.62E+06	1.33E+06	-1.59E+06	1.31E+06

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 180; Fn=0.3
fptot_my (kN-m)

Data identically zero, insufficient, or not available from NSHIPMO.

Figure G–240. Time history of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–479. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-8.43E+03	3.00E+06	-92	3.75E+03	-112
A2	4.47E+05	2.03E+06	-84	2.90E+05	-55
FD	4.04E+05	2.63E+06	-105	2.21E+05	-93
L1	-6.22E+04	2.30E+06	-101	2.61E+04	155
L3	2.34E+05	1.37E+06	-64	1.27E+05	-59
L4	-6.15E+04	1.68E+06	-88	6.72E+04	-155
NF	1.26E+05	2.01E+06	-3	1.83E+05	-169
NS	—	—	—	—	—

Table G–480. Minimum and maximum of of M_y^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.02E+06	2.99E+06	-2.95E+06	2.89E+06
A2	-1.99E+06	2.35E+06	-1.84E+06	2.28E+06
FD	-2.49E+06	2.86E+06	-2.35E+06	2.80E+06
L1	-2.36E+06	2.24E+06	-2.34E+06	2.21E+06
L3	-1.29E+06	1.47E+06	-1.27E+06	1.46E+06
L4	-1.95E+06	2.12E+06	-1.67E+06	1.87E+06
NF	-1.90E+06	2.21E+06	-1.87E+06	2.16E+06
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–241. Time history of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–481. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.83E-02	4.63	173	2.16E-02	31
A2	1.79E-02	4.55	171	2.13E-02	29
FD	-4.14E-05	3.28E-04	0	1.44E-04	133
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	1.38E-03	9.36E-03	22	8.99E-03	58

Table G–482. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-4.86	4.82	-4.79	4.75
A2	-4.78	4.74	-4.72	4.68
FD	-4.63E-03	3.82E-03	-1.08E-03	1.09E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.152	0.102	-3.58E-02	4.03E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.0
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–242. Time history of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–483. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	5.51E-02	13.9	173	6.49E-02	31
A2	-4.21E+03	8.15E+03	142	8.69E+03	11
FD	1.84E-04	1.47E-04	104	3.93E-04	160
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	7.66E-03	4.63E-02	61	6.35E-02	59

Table G–484. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-14.6	14.5	-14.4	14.3
A2	-4.15E+05	1.20E+05	-5.54E+04	1.60E+04
FD	-5.76E-03	6.43E-03	-1.79E-03	2.59E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.227	0.523	-0.140	0.475

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta =   0; Fn=0.0
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–243. Time history of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–485. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	7.35E-02	18.6	173	8.67E-02	31
A2	760.	1.62E+03	71	1.89E+03	45
FD	-2.53E-04	5.26E-04	-43	3.23E-04	6
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.15E-02	3.52E-02	-33	4.25E-02	-26

Table G–486. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-19.5	19.3	-19.2	19.1
A2	-19.2	1.44E+05	-1.66E+03	1.93E+04
FD	-6.52E-03	4.48E-03	-2.23E-03	1.16E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.579	0.668	-0.136	0.141

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 0; Fn=0.0
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–244. Time history of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–487. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	0.110	27.9	173	0.130	31
A2	95.8	206.	121	215.	142
FD	-3.59E-05	3.05E-05	-54	3.47E-04	30
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–488. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-29.3	29.0	-28.9	28.6
A2	-1.14E+03	1.03E+04	-192.	1.56E+03
FD	-8.25E-03	8.35E-03	-2.57E-03	2.48E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 45; Fn=0.0
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–245. Time history of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–489. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of $M_{\dot{z}}^{\text{ptot}}$ for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-155.	1.22E+05	-13	115.	-94
A2	401.	1.26E+05	-14	5.31E+03	-64
FD	77.2	1.41E+05	-22	5.00E+03	-71
L1	-2.91E+03	1.16E+05	-13	2.73E+03	-84
L3	-2.89E+03	1.15E+05	-14	6.44E+03	-65
L4	-1.45E+03	1.14E+05	-14	2.61E+03	-83
NF	—	—	—	—	—
NS	-764.	1.10E+05	-11	2.45E+03	-118

Table G–490. Minimum and maximum of of $M_{\dot{z}}^{\text{ptot}}$ for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.23E+05	1.23E+05	-1.22E+05	1.22E+05
A2	-1.18E+05	1.20E+05	-1.16E+05	1.19E+05
FD	-1.39E+05	1.44E+05	-1.38E+05	1.42E+05
L1	-1.16E+05	1.15E+05	-1.16E+05	1.15E+05
L3	-1.15E+05	1.17E+05	-1.15E+05	1.16E+05
L4	-1.16E+05	1.16E+05	-1.14E+05	1.14E+05
NF	—	—	—	—
NS	-1.07E+05	1.11E+05	-1.06E+05	1.10E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–246. Time history of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–491. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-466.	3.67E+05	-13	345.	-94
A2	-253.	3.88E+05	-14	4.77E+04	-68
FD	580.	4.36E+05	-21	4.31E+04	-77
L1	-2.66E+04	3.47E+05	-13	2.48E+04	-86
L3	-2.63E+04	3.43E+05	-13	5.78E+04	-74
L4	-1.22E+04	3.39E+05	-15	2.80E+04	-101
NF	—	—	—	—	—
NS	-4.44E+03	3.64E+05	-15	3.24E+04	-125

Table G–492. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.70E+05	3.71E+05	-3.66E+05	3.67E+05
A2	-3.84E+05	7.52E+05	-3.72E+05	4.22E+05
FD	-4.24E+05	4.62E+05	-4.19E+05	4.57E+05
L1	-3.53E+05	3.42E+05	-3.52E+05	3.41E+05
L3	-3.47E+05	3.62E+05	-3.46E+05	3.60E+05
L4	-3.43E+05	3.70E+05	-3.22E+05	3.47E+05
NF	—	—	—	—
NS	-3.31E+05	3.79E+05	-3.25E+05	3.70E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–247. Time history of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–493. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-622.	4.90E+05	-13	460.	-94
A2	743.	5.40E+05	-14	9.51E+04	-78
FD	1.18E+03	5.91E+05	-21	7.57E+04	-80
L1	-4.73E+04	4.62E+05	-13	4.42E+04	-86
L3	-4.69E+04	4.55E+05	-13	1.00E+05	-77
L4	-1.54E+04	4.47E+05	-16	6.04E+04	-106
NF	—	—	—	—	—
NS	-3.85E+03	4.86E+05	-19	1.06E+05	-143

Table G–494. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.94E+05	4.95E+05	-4.89E+05	4.90E+05
A2	-4.94E+05	7.10E+05	-4.91E+05	6.21E+05
FD	-5.70E+05	6.39E+05	-5.64E+05	6.31E+05
L1	-4.75E+05	4.55E+05	-4.74E+05	4.52E+05
L3	-4.68E+05	4.89E+05	-4.66E+05	4.86E+05
L4	-4.20E+05	5.11E+05	-3.89E+05	4.78E+05
NF	—	—	—	—
NS	-4.65E+05	5.32E+05	-4.23E+05	5.25E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 45; Fn=0.0
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–248. Time history of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–495. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-933.	7.36E+05	-13	691.	-94
A2	2.13E+04	8.74E+05	-15	1.75E+05	-71
FD	2.96E+03	9.22E+05	-20	1.57E+05	-82
L1	-1.07E+05	6.94E+05	-13	9.95E+04	-86
L3	-1.06E+05	6.79E+05	-13	2.04E+05	-80
L4	-5.50E+04	6.76E+05	-15	1.61E+05	-114
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–496. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-7.42E+05	7.43E+05	-7.34E+05	7.35E+05
A2	-7.99E+05	1.45E+06	-7.85E+05	1.01E+06
FD	-8.87E+05	1.03E+06	-8.76E+05	1.02E+06
L1	-7.28E+05	6.77E+05	-7.26E+05	6.73E+05
L3	-7.38E+05	7.46E+05	-7.35E+05	7.42E+05
L4	-6.65E+05	8.10E+05	-5.96E+05	7.44E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.0
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–249. Time history of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–497. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-43.3	4.40E+04	79	78.1	-75
A2	-70.8	4.31E+04	79	6.29E+03	170
FD	-1.33	6.50E+04	71	4.89E+03	165
L1	-1.45E+03	3.97E+04	73	2.95E+03	-22
L3	-1.45E+03	3.95E+04	72	2.31E+03	-170
L4	-2.70E+03	3.76E+04	70	8.16E+03	-66
NF	—	—	—	—	—
NS	-1.06E+03	3.33E+04	83	6.50E+03	-57

Table G–498. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.38E+04	4.38E+04	-4.31E+04	4.37E+04
A2	-4.77E+04	4.66E+04	-4.61E+04	4.49E+04
FD	-6.79E+04	6.42E+04	-6.70E+04	6.43E+04
L1	-4.09E+04	3.92E+04	-4.08E+04	3.91E+04
L3	-4.30E+04	3.66E+04	-4.28E+04	3.67E+04
L4	-5.49E+04	3.77E+04	-4.78E+04	3.61E+04
NF	—	—	—	—
NS	-4.30E+04	3.19E+04	-4.06E+04	3.00E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–250. Time history of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–499. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-130.	1.32E+05	79	235.	-75
A2	-4.65E+03	1.14E+05	76	5.39E+04	164
FD	260.	1.85E+05	70	3.73E+04	166
L1	-1.29E+04	1.19E+05	73	2.64E+04	-22
L3	-1.30E+04	1.12E+05	71	1.03E+04	-151
L4	-1.01E+04	1.15E+05	65	5.92E+04	-60
NF	—	—	—	—	—
NS	-5.66E+03	1.05E+05	80	6.95E+04	-51

Table G–500. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.32E+05	1.32E+05	-1.30E+05	1.31E+05
A2	-5.68E+05	1.50E+05	-1.82E+05	1.35E+05
FD	-2.13E+05	1.92E+05	-2.10E+05	1.89E+05
L1	-1.37E+05	1.20E+05	-1.37E+05	1.19E+05
L3	-1.42E+05	9.54E+04	-1.41E+05	9.55E+04
L4	-2.34E+05	1.62E+05	-2.02E+05	1.26E+05
NF	—	—	—	—
NS	-1.99E+05	1.90E+05	-1.81E+05	1.38E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.0
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–251. Time history of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–501. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-174.	1.77E+05	79	314.	-75
A2	71.0	1.34E+05	80	7.79E+04	163
FD	648.	2.37E+05	70	6.09E+04	167
L1	-2.30E+04	1.59E+05	73	4.69E+04	-22
L3	-2.31E+04	1.42E+05	70	1.24E+04	-127
L4	-9.22E+03	1.54E+05	63	1.05E+05	-60
NF	—	—	—	—	—
NS	-1.54E+03	2.13E+05	77	1.71E+05	-38

Table G–502. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.76E+05	1.76E+05	-1.73E+05	1.75E+05
A2	-1.91E+05	2.47E+05	-1.84E+05	1.77E+05
FD	-2.88E+05	2.58E+05	-2.82E+05	2.53E+05
L1	-1.96E+05	1.63E+05	-1.95E+05	1.62E+05
L3	-1.96E+05	1.18E+05	-1.95E+05	1.18E+05
L4	-3.51E+05	2.35E+05	-3.23E+05	1.93E+05
NF	—	—	—	—
NS	-3.77E+05	3.58E+05	-3.64E+05	3.30E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.0
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–252. Time history of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–503. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-261.	2.65E+05	79	470.	-75
A2	-2.54E+03	1.60E+05	79	1.63E+05	163
FD	1.77E+03	3.22E+05	69	1.19E+05	167
L1	-5.17E+04	2.38E+05	73	1.06E+05	-22
L3	-5.20E+04	1.92E+05	69	2.87E+04	-66
L4	-8.97E+03	2.87E+05	67	2.08E+05	-60
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–504. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.64E+05	2.64E+05	-2.60E+05	2.63E+05
A2	-5.94E+05	2.82E+05	-3.06E+05	2.71E+05
FD	-4.35E+05	3.89E+05	-4.22E+05	3.79E+05
L1	-3.36E+05	2.57E+05	-3.34E+05	2.55E+05
L3	-3.10E+05	1.48E+05	-3.07E+05	1.48E+05
L4	-7.04E+05	5.13E+05	-6.74E+05	3.44E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–253. Time history of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–505. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$,
$F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	184.	1.20E+05	179	145.	92
A2	-204.	1.23E+05	178	3.41E+03	47
FD	-47.5	1.44E+05	173	4.92E+03	40
L1	1.67E+03	1.16E+05	177	4.93E+03	126
L3	1.65E+03	1.16E+05	176	6.20E+03	87
L4	954.	1.13E+05	176	1.06E+04	94
NF	—	—	—	—	—
NS	-611.	1.10E+05	-180	7.93E+03	88

Table G–506. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/60$,
$\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered		Filtered	
	Minimum (kN-m)	Maximum (kN-m)	Minimum (kN-m)	Maximum (kN-m)
A1	-1.21E+05	1.21E+05	-1.20E+05	1.20E+05
A2	-1.20E+05	1.17E+05	-1.18E+05	1.15E+05
FD	-1.48E+05	1.40E+05	-1.46E+05	1.38E+05
L1	-1.18E+05	1.14E+05	-1.18E+05	1.14E+05
L3	-1.20E+05	1.11E+05	-1.20E+05	1.11E+05
L4	-1.27E+05	1.07E+05	-1.22E+05	1.03E+05
NF	—	—	—	—
NS	-1.18E+05	9.98E+04	-1.16E+05	9.88E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–254. Time history of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–507. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	552.	3.62E+05	179	435.	92
A2	1.22E+03	3.85E+05	177	5.28E+04	45
FD	-206.	4.45E+05	173	4.23E+04	45
L1	1.51E+04	3.48E+05	177	4.39E+04	125
L3	1.49E+04	3.45E+05	176	6.06E+04	92
L4	6.10E+03	3.24E+05	172	9.26E+04	89
NF	—	—	—	—	—
NS	-3.08E+03	3.63E+05	176	7.21E+04	92

Table G–508. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.65E+05	3.65E+05	-3.61E+05	3.61E+05
A2	-4.30E+05	3.71E+05	-4.21E+05	3.61E+05
FD	-4.77E+05	4.10E+05	-4.72E+05	4.07E+05
L1	-3.69E+05	3.37E+05	-3.67E+05	3.36E+05
L3	-3.87E+05	3.02E+05	-3.85E+05	3.01E+05
L4	-4.48E+05	2.74E+05	-4.10E+05	2.56E+05
NF	—	—	—	—
NS	-4.20E+05	3.14E+05	-4.16E+05	2.91E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.0
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–255. Time history of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–509. Coefficients of the Fourier fit $a_0+a_1 \sin{(\omega t + \Phi_1)}+a_2 \sin{(2\omega t + \Phi_2)}+$ $\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	738.	4.84E+05	179	581.	92
A2	-8.85E+03	5.37E+05	175	9.24E+04	46
FD	-518.	6.04E+05	172	7.45E+04	47
L1	2.68E+04	4.64E+05	177	7.79E+04	125
L3	2.65E+04	4.58E+05	176	1.09E+05	95
L4	1.16E+04	4.24E+05	170	1.66E+05	88
NF	—	—	—	—	—
NS	-626.	4.79E+05	175	1.53E+05	106

Table G–510. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.88E+05	4.87E+05	-4.82E+05	4.82E+05
A2	-1.01E+06	4.80E+05	-6.55E+05	4.76E+05
FD	-6.62E+05	5.43E+05	-6.54E+05	5.38E+05
L1	-5.02E+05	4.51E+05	-4.99E+05	4.50E+05
L3	-5.34E+05	3.79E+05	-5.31E+05	3.79E+05
L4	-6.24E+05	6.23E+05	-5.69E+05	3.83E+05
NF	—	—	—	—
NS	-5.95E+05	4.65E+05	-5.88E+05	4.34E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 135; Fn=0.0
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–256. Time history of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–511. Coefficients of the Fourier fit $a_0+a_1\sin{(\omega t+\Phi_1)}+a_2\sin{(2\omega t+\Phi_2)}+$
$\cdots$ of M_z^{ptot} for one period for $H/\lambda=1/10$, $\lambda/L=1$, $\beta=135°$, $F_n=0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.11E+03	7.25E+05	179	872.	92
A2	-4.33E+03	8.69E+05	176	1.93E+05	50
FD	-1.55E+03	9.44E+05	172	1.56E+05	49
L1	6.04E+04	6.95E+05	177	1.75E+05	125
L3	6.00E+04	6.84E+05	175	2.35E+05	100
L4	5.39E+04	6.44E+05	165	3.75E+05	87
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–512. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda=1/10$, $\lambda/L=1$, $\beta=135°$, $F_n=0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-7.32E+05	7.30E+05	-7.24E+05	7.22E+05
A2	-1.02E+06	7.74E+05	-1.00E+06	7.58E+05
FD	-1.07E+06	8.23E+05	-1.05E+06	8.15E+05
L1	-7.87E+05	6.97E+05	-7.82E+05	6.95E+05
L3	-8.46E+05	6.28E+05	-8.40E+05	6.24E+05
L4	-9.52E+05	7.59E+05	-9.06E+05	7.31E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 180; Fn=0.0
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–257. Time history of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–513. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.07E-03	1.30	57	4.73E-03	153
A2	8.93E-04	1.23	51	4.50E-03	166
FD	-9.63E-05	8.85E-03	12	8.41E-04	-44
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	4.26E-03	9.07E-03	-136	1.23E-02	133

Table G–514. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.26	1.31	-1.25	1.30
A2	-1.20	1.24	-1.19	1.23
FD	-1.47E-02	2.52E-02	-9.35E-03	1.07E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.110	0.107	-3.94E-02	4.07E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 180; Fn=0.0
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–258. Time history of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–515. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	3.22E-03	3.91	57	1.42E-02	153
A2	-2.39E+03	1.12E+04	-67	9.52E+03	-78
FD	-1.35E-04	2.67E-02	15	2.61E-03	-41
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-9.69E-03	1.35E-02	-172	1.18E-02	-160

Table G–516. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.80	3.94	-3.77	3.90
A2	-5.89E+05	1.23E+05	-7.88E+04	1.65E+04
FD	-4.23E-02	7.31E-02	-2.55E-02	3.24E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.362	0.551	-0.223	0.119

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–259. Time history of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–517. Coefficients of the Fourier fit $a_0+a_1 \sin{(\omega t + \Phi_1)}+a_2 \sin{(2\omega t + \Phi_2)}+$ $\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	4.30E-03	5.22	57	1.90E-02	153
A2	-2.46E+03	5.15E+03	-135	5.91E+03	180
FD	-3.25E-04	3.52E-02	15	3.56E-03	-50
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.98E-03	9.61E-02	-142	6.75E-02	-115

Table G–518. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-5.08	5.25	-5.03	5.21
A2	-4.85E+05	4.97	-6.46E+04	5.53E+03
FD	-5.30E-02	9.85E-02	-3.23E-02	4.26E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-3.01	2.90	-0.256	0.200

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 180; Fn=0.0
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–260. Time history of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–519. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	6.45E-03	7.83	57	2.85E-02	153
A2	727.	4.94E+03	84	3.92E+03	-160
FD	-1.27E-04	5.24E-02	15	4.67E-03	-56
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–520. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-7.62	7.88	-7.55	7.81
A2	-3.34E+05	3.30E+05	-4.55E+04	4.47E+04
FD	-7.24E-02	0.142	-5.00E-02	6.34E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–261. Time history of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–521. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-3.35E-03	1.04	133	2.68E-02	-17
A2	-3.60E-03	1.12	127	2.69E-02	-19
FD	-2.50E-05	1.03E-04	-123	8.03E-05	-105
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	2.24E-04	6.76E-03	90	3.16E-02	32

Table G–522. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.14	1.15	-1.09	1.03
A2	-1.20	1.16	-1.17	1.11
FD	-5.00E-03	6.00E-03	-1.55E-03	1.54E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.120	0.232	-9.35E-02	0.166

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.3
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–262. Time history of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–523. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-1.01E-02	3.14	133	8.07E-02	-17
A2	-63.2	1.66E+03	88	2.39E+03	5
FD	-1.39E-05	3.01E-04	-17	1.96E-04	71
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	8.31E-03	4.65E-02	12	5.04E-02	130

Table G–524. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.42	3.44	-3.28	3.09
A2	-4.14E+05	1.24E+05	-3.26E+04	3.21E+04
FD	-7.93E-03	5.29E-03	-2.03E-03	1.86E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.46	1.34	-0.278	0.331

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 0; Fn=0.3
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–263. Time history of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–525. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-1.35E-02	4.19	133	0.108	-17
A2	370.	1.07E+03	60	811.	94
FD	-1.89E-04	2.96E-04	-44	1.82E-04	58
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	1.53E-02	6.99E-02	161	5.37E-02	-139

Table G–526. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.57	4.60	-4.38	4.13
A2	-5.40E+04	1.45E+05	-8.61E+03	1.94E+04
FD	-8.78E-03	8.43E-03	-2.64E-03	2.02E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.328	0.541	-0.239	0.362

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 0; Fn=0.3
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–264. Time history of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–527. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-2.02E-02	6.29	133	0.162	-17
A2	-3.34E+03	5.70E+03	-34	4.94E+03	23
FD	2.43E-04	3.80E-04	-172	8.67E-05	-9
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–528. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-6.86	6.90	-6.56	6.19
A2	-7.15E+05	1.77E+05	-9.57E+04	2.36E+04
FD	-9.67E-03	9.18E-03	-2.21E-03	2.48E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–265. Time history of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–529. Coefficients of the Fourier fit $a_0+a_1 \sin (\omega t + \Phi_1)+a_2 \sin (2\omega t + \Phi_2)+ \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	21.7	1.05E+05	-16	35.0	156
A2	404.	1.08E+05	-16	4.81E+03	-44
FD	34.8	1.10E+05	-4	4.91E+03	-45
L1	-22.4	1.01E+05	-13	1.64E+03	-83
L3	-30.3	1.01E+05	-14	5.23E+03	-52
L4	6.48E+03	1.02E+05	-12	1.05E+03	-70
NF	—	—	—	—	—
NS	-5.20E+03	1.04E+05	5	5.15E+03	-109

Table G–530. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.05E+05	1.05E+05	-1.05E+05	1.05E+05
A2	-1.03E+05	1.04E+05	-9.97E+04	1.03E+05
FD	-1.08E+05	1.14E+05	-1.07E+05	1.13E+05
L1	-9.99E+04	1.03E+05	-9.98E+04	1.02E+05
L3	-9.94E+04	1.03E+05	-9.93E+04	1.03E+05
L4	-9.91E+04	1.30E+05	-9.64E+04	1.13E+05
NF	—	—	—	—
NS	-1.03E+05	1.02E+05	-1.02E+05	1.02E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 45; Fn=0.3
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–266. Time history of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–531. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	65.3	3.15E+05	-16	105.	156
A2	2.42E+03	3.38E+05	-15	4.95E+04	-56
FD	212.	3.44E+05	-3	4.21E+04	-50
L1	-256.	3.04E+05	-13	1.48E+04	-83
L3	-359.	2.99E+05	-13	4.65E+04	-61
L4	5.58E+04	3.18E+05	-10	2.02E+04	-85
NF	—	—	—	—	—
NS	-5.29E+04	3.20E+05	3	7.30E+04	-106

Table G–532. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.16E+05	3.17E+05	-3.15E+05	3.16E+05
A2	-3.46E+05	6.73E+05	-3.43E+05	3.72E+05
FD	-3.25E+05	3.73E+05	-3.25E+05	3.72E+05
L1	-2.92E+05	3.16E+05	-2.92E+05	3.16E+05
L3	-2.90E+05	3.32E+05	-2.90E+05	3.33E+05
L4	-2.42E+05	4.64E+05	-2.39E+05	3.85E+05
NF	—	—	—	—
NS	-3.38E+05	3.20E+05	-3.29E+05	3.21E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 45; Fn=0.3
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–267. Time history of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–533. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	87.2	4.21E+05	-16	141.	156
A2	1.07E+03	4.67E+05	-15	9.09E+04	-62
FD	353.	4.68E+05	-3	7.40E+04	-52
L1	-469.	4.05E+05	-13	2.63E+04	-83
L3	-604.	3.97E+05	-13	8.04E+04	-65
L4	9.33E+04	4.39E+05	-9	3.81E+04	-79
NF	—	—	—	—	—
NS	-9.40E+04	4.49E+05	4	1.34E+05	-105

Table G–534. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.22E+05	4.23E+05	-4.21E+05	4.22E+05
A2	-4.70E+05	5.42E+05	-4.55E+05	5.37E+05
FD	-4.38E+05	5.22E+05	-4.37E+05	5.20E+05
L1	-3.85E+05	4.27E+05	-3.85E+05	4.27E+05
L3	-3.83E+05	4.56E+05	-3.83E+05	4.58E+05
L4	-3.13E+05	6.64E+05	-3.02E+05	5.52E+05
NF	—	—	—	—
NS	-5.06E+05	4.46E+05	-4.97E+05	4.47E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 45; Fn=0.3
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–268. Time history of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–535. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	131.	6.31E+05	-16	211.	156
A2	6.88E+03	7.67E+05	-14	1.87E+05	-59
FD	926.	7.40E+05	-2	1.54E+05	-54
L1	-1.09E+03	6.07E+05	-13	5.92E+04	-83
L3	-1.25E+03	5.91E+05	-13	1.61E+05	-68
L4	1.70E+05	7.07E+05	-10	9.67E+04	-66
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–536. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-6.33E+05	6.34E+05	-6.31E+05	6.33E+05
A2	-1.07E+06	1.57E+06	-7.97E+05	8.92E+05
FD	-6.90E+05	8.56E+05	-6.88E+05	8.54E+05
L1	-5.65E+05	6.58E+05	-5.64E+05	6.57E+05
L3	-5.76E+05	7.20E+05	-5.75E+05	7.22E+05
L4	-8.31E+05	1.00E+06	-5.34E+05	9.21E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.3
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–269. Time history of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–537. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-60.3	6.34E+04	1	71.5	2
A2	-87.8	6.34E+04	0	6.26E+03	169
FD	17.1	9.88E+04	32	4.87E+03	165
L1	1.61E+03	4.51E+04	10	3.06E+03	-83
L3	1.61E+03	4.51E+04	9	5.17E+03	-153
L4	8.71E+03	4.13E+04	21	8.97E+03	-94
NF	—	—	—	—	—
NS	-1.24E+04	5.11E+04	139	1.03E+04	43

Table G–538. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-6.31E+04	6.32E+04	-6.25E+04	6.26E+04
A2	-6.44E+04	6.25E+04	-6.42E+04	6.19E+04
FD	-1.03E+05	9.37E+04	-1.02E+05	9.29E+04
L1	-4.06E+04	4.97E+04	-4.05E+04	4.95E+04
L3	-4.35E+04	4.85E+04	-4.33E+04	4.83E+04
L4	-3.78E+04	5.72E+04	-3.26E+04	5.62E+04
NF	—	—	—	—
NS	-7.20E+04	3.18E+04	-6.76E+04	3.12E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–270. Time history of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–539. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-181.	1.91E+05	1	215.	2
A2	-4.70E+03	1.94E+05	-5	5.38E+04	163
FD	315.	2.90E+05	31	3.72E+04	166
L1	1.46E+04	1.35E+05	10	2.74E+04	-83
L3	1.46E+04	1.34E+05	6	3.75E+04	-144
L4	7.19E+04	1.26E+05	9	6.42E+04	-83
NF	—	—	—	—	—
NS	-1.05E+05	2.23E+05	145	9.74E+04	31

Table G–540. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.90E+05	1.90E+05	-1.88E+05	1.88E+05
A2	-6.13E+05	2.17E+05	-2.25E+05	2.07E+05
FD	-3.19E+05	2.49E+05	-3.15E+05	2.48E+05
L1	-9.66E+04	1.77E+05	-9.64E+04	1.76E+05
L3	-1.16E+05	1.75E+05	-1.16E+05	1.74E+05
L4	-1.02E+05	2.63E+05	-7.81E+04	2.47E+05
NF	—	—	—	—
NS	-4.98E+05	7.74E+04	-4.32E+05	5.65E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.3
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–271. Time history of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–541. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-242.	2.55E+05	1	287.	2
A2	-118.	2.48E+05	-9	7.76E+04	162
FD	721.	3.79E+05	30	6.08E+04	167
L1	2.61E+04	1.81E+05	10	4.86E+04	-83
L3	2.59E+04	1.77E+05	4	6.07E+04	-138
L4	1.16E+05	1.87E+05	2	1.04E+05	-86
NF	—	—	—	—	—
NS	-1.56E+05	3.39E+05	134	2.05E+05	16

Table G–542. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.54E+05	2.54E+05	-2.51E+05	2.51E+05
A2	-2.60E+05	3.10E+05	-2.57E+05	2.97E+05
FD	-4.23E+05	3.13E+05	-4.18E+05	3.12E+05
L1	-1.17E+05	2.54E+05	-1.17E+05	2.53E+05
L3	-1.46E+05	2.54E+05	-1.45E+05	2.53E+05
L4	-1.52E+05	3.96E+05	-1.17E+05	3.86E+05
NF	—	—	—	—
NS	-7.61E+05	1.76E+05	-7.35E+05	1.34E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–272. Time history of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–543. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-363.	3.82E+05	1	431.	2
A2	-2.64E+03	3.76E+05	-15	1.63E+05	162
FD	1.88E+03	5.47E+05	27	1.18E+05	167
L1	5.87E+04	2.71E+05	10	1.09E+05	-83
L3	5.84E+04	2.62E+05	-1	1.20E+05	-128
L4	2.15E+05	3.75E+05	-7	2.34E+05	-105
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–544. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.80E+05	3.81E+05	-3.77E+05	3.77E+05
A2	-5.31E+05	5.54E+05	-3.78E+05	5.26E+05
FD	-6.11E+05	4.53E+05	-6.08E+05	4.49E+05
L1	-1.60E+05	4.37E+05	-1.59E+05	4.35E+05
L3	-2.02E+05	4.37E+05	-1.99E+05	4.34E+05
L4	-2.98E+05	1.14E+06	-2.46E+05	8.50E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.3
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–273. Time history of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–545. Coefficients of the Fourier fit $a_0+a_1 \sin\left(\omega t + \Phi_1\right)+a_2 \sin\left(2\omega t + \Phi_2\right)+$ $\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	85.0	1.22E+05	171	583.	106
A2	217.	1.24E+05	169	2.70E+03	46
FD	-14.2	1.72E+05	158	5.00E+03	58
L1	1.66E+03	1.21E+05	172	4.75E+03	99
L3	1.67E+03	1.20E+05	171	7.40E+03	71
L4	7.63E+03	1.25E+05	172	7.33E+03	72
NF	—	—	—	—	—
NS	-9.86E+03	1.25E+05	-176	3.41E+03	-13

Table G–546. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.22E+05	1.21E+05	-1.22E+05	1.18E+05
A2	-1.28E+05	1.19E+05	-1.21E+05	1.15E+05
FD	-1.76E+05	1.66E+05	-1.72E+05	1.63E+05
L1	-1.24E+05	1.18E+05	-1.22E+05	1.17E+05
L3	-1.26E+05	1.15E+05	-1.24E+05	1.14E+05
L4	-1.31E+05	1.30E+05	-1.22E+05	1.22E+05
NF	—	—	—	—
NS	-1.36E+05	1.16E+05	-1.33E+05	1.14E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–274. Time history of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–547. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	256.	3.67E+05	171	1.75E+03	106
A2	-930.	3.93E+05	169	5.27E+04	46
FD	-334.	5.29E+05	159	4.31E+04	64
L1	1.49E+04	3.63E+05	172	4.27E+04	99
L3	1.49E+04	3.58E+05	171	6.90E+04	77
L4	6.17E+04	3.73E+05	169	5.90E+04	79
NF	—	—	—	—	—
NS	-7.88E+04	3.54E+05	-178	3.13E+04	31

Table G–548. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.68E+05	3.64E+05	-3.67E+05	3.56E+05
A2	-4.92E+05	3.71E+05	-4.30E+05	3.45E+05
FD	-5.65E+05	4.80E+05	-5.50E+05	4.73E+05
L1	-3.87E+05	3.42E+05	-3.83E+05	3.40E+05
L3	-4.09E+05	3.04E+05	-4.04E+05	3.03E+05
L4	-3.71E+05	5.08E+05	-3.57E+05	3.72E+05
NF	—	—	—	—
NS	-4.76E+05	3.13E+05	-4.65E+05	2.76E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.3
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–275. Time history of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–549. Coefficients of the Fourier fit $a_0+a_1 \sin (\omega t + \Phi_1)+a_2 \sin (2\omega t + \Phi_2)+ \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	341.	4.89E+05	171	2.34E+03	106
A2	-763.	5.41E+05	168	9.47E+04	47
FD	-696.	7.15E+05	159	7.57E+04	67
L1	2.64E+04	4.83E+05	172	7.58E+04	99
L3	2.65E+04	4.76E+05	171	1.22E+05	80
L4	9.95E+04	5.01E+05	165	1.01E+05	81
NF	—	—	—	—	—
NS	-1.22E+05	4.62E+05	-171	5.58E+04	83

Table G–550. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.91E+05	4.86E+05	-4.90E+05	4.75E+05
A2	-6.15E+05	4.81E+05	-6.08E+05	4.56E+05
FD	-7.77E+05	6.31E+05	-7.56E+05	6.25E+05
L1	-5.28E+05	4.50E+05	-5.22E+05	4.47E+05
L3	-5.64E+05	3.86E+05	-5.57E+05	3.83E+05
L4	-4.94E+05	9.27E+05	-4.70E+05	5.26E+05
NF	—	—	—	—
NS	-6.57E+05	3.01E+05	-6.46E+05	2.89E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 135; Fn=0.3
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–276. Time history of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–551. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	512.	7.34E+05	171	3.51E+03	106
A2	-4.29E+03	8.83E+05	168	1.90E+05	49
FD	-1.61E+03	1.11E+06	160	1.58E+05	69
L1	5.94E+04	7.25E+05	172	1.71E+05	99
L3	5.95E+04	7.11E+05	170	2.59E+05	83
L4	1.98E+05	8.13E+05	160	2.22E+05	76
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–552. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-7.37E+05	7.30E+05	-7.35E+05	7.13E+05
A2	-1.03E+06	7.46E+05	-1.01E+06	7.09E+05
FD	-1.23E+06	9.68E+05	-1.20E+06	9.47E+05
L1	-8.28E+05	6.72E+05	-8.16E+05	6.68E+05
L3	-8.96E+05	6.32E+05	-8.82E+05	6.23E+05
L4	-8.05E+05	9.99E+05	-7.52E+05	9.64E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 180; Fn=0.3
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–277. Time history of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–553. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-1.19E-03	2.37	32	8.56E-03	-54
A2	-1.42E-03	2.32	29	9.32E-03	-62
FD	8.03E-04	6.10E-02	15	1.78E-02	31
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-3.36E-03	7.24E-03	-149	2.05E-02	93

Table G–554. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered		Filtered	
	Minimum (kN-m)	Maximum (kN-m)	Minimum (kN-m)	Maximum (kN-m)
A1	-2.36	2.65	-2.29	2.32
A2	-2.31	2.61	-2.24	2.26
FD	-0.101	0.109	-6.47E-02	8.61E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.389	0.439	-4.90E-02	3.84E-02

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3 and LAMP-4.

Figure G–278. Time history of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–555. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-3.59E-03	7.12	32	2.57E-02	-54
A2	776.	1.74E+03	14	2.21E+03	-60
FD	-2.14E-03	0.160	19	7.07E-02	28
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	-8.69E-11	2.04E-10	17	3.06E-10	-112
NS	-1.51E-02	4.47E-02	-85	1.34E-02	81

Table G–556. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-7.10	7.99	-6.88	6.98
A2	-6.95	9.94E+04	-1.13E+03	1.33E+04
FD	-0.295	0.324	-0.186	0.271
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	-1.20E-09	6.91E-10	-4.38E-10	4.86E-10
NS	-0.565	0.792	-8.48E-02	8.38E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 180; Fn=0.3
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3 and LAMP-4.

Figure G–279. Time history of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–557. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-4.79E-03	9.50	32	3.44E-02	-54
A2	-108.	197.	-70	203.	-44
FD	-2.73E-03	0.213	19	9.58E-02	25
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	4.07E-10	7.21E-10	-106	2.93E-10	80
NS	-2.49E-03	6.57E-02	177	2.47E-02	-41

Table G–558. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-9.48	10.7	-9.19	9.31
A2	-5.96E+03	18.8	-793.	76.2
FD	-0.397	0.436	-0.248	0.360
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	-6.39E-10	1.89E-09	-2.52E-10	1.31E-09
NS	-1.30	0.810	-0.149	0.153

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 180; Fn=0.3
fptot_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NSHIPMO.

Figure G–280. Time history of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–559. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-7.18E-03	14.3	32	5.15E-02	-54
A2	216.	432.	-144	365.	-17
FD	1.49E-02	0.318	16	0.160	41
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	-4.41E-10	5.89E-10	42	3.27E-11	-53
NS	—	—	—	—	—

Table G–560. Minimum and maximum of of M_z^{ptot} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-14.2	16.0	-13.8	14.0
A2	-1.13E+03	9.92E+03	-251.	1.34E+03
FD	-0.590	0.731	-0.410	0.538
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	-2.97E-09	1.84E-09	-1.79E-09	1.62E-09
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–281. Time history of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–561. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	21.3	55.4	66	88.1	32
FD	-11.3	13.7	62	80.8	24
L1	—	—	—	—	—
L3	-40.1	13.4	63	80.2	32
L4	-40.1	13.4	63	80.2	32
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–562. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-96.7	180.	-89.9	171.
FD	-99.1	72.1	-95.7	69.2
L1	—	—	—	—
L3	-127.	42.2	-126.	40.9
L4	-127.	42.2	-126.	40.9
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.0
fhst_x (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–282. Time history of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–563. Coefficients of the Fourier fit $a_0 + a_1 \sin\left(\omega t + \Phi_1\right) + a_2 \sin\left(2\omega t + \Phi_2\right) +$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	28.5	364.	47	519.	5
FD	-19.5	303.	43	517.	6
L1	—	—	—	—	—
L3	-47.2	302.	45	515.	13
L4	-47.2	302.	45	515.	13
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–564. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-681.	864.	-646.	800.
FD	-688.	703.	-661.	685.
L1	—	—	—	—
L3	-700.	664.	-691.	660.
L4	-700.	664.	-691.	660.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–283. Time history of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–565. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	1.74	643.	38	688.	17
FD	-13.3	605.	31	650.	13
L1	—	—	—	—	—
L3	-42.4	603.	33	639.	19
L4	-42.4	603.	33	639.	19
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–566. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-1.18E+03	1.42E+03	-1.12E+03	1.32E+03
FD	-1.19E+03	1.15E+03	-1.15E+03	1.12E+03
L1	—	—	—	—
L3	-1.17E+03	1.10E+03	-1.16E+03	1.09E+03
L4	-1.17E+03	1.10E+03	-1.16E+03	1.09E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–284. Time history of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–567. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	117.	989.	-28	913.	32
FD	-11.4	1.21E+03	-37	1.14E+03	27
L1	—	—	—	—	—
L3	-30.3	1.21E+03	-35	1.08E+03	33
L4	-30.3	1.21E+03	-35	1.08E+03	33
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–568. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-1.80E+03	1.47E+03	-1.65E+03	1.29E+03
FD	-2.62E+03	1.52E+03	-2.44E+03	1.42E+03
L1	—	—	—	—
L3	-2.56E+03	1.46E+03	-2.50E+03	1.43E+03
L4	-2.56E+03	1.46E+03	-2.50E+03	1.43E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 45; Fn=0.0
fhst_x (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–285. Time history of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–569. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	20.9	49.1	70	32.3	-10
FD	-9.90	9.47	19	35.2	-21
L1	—	—	—	—	—
L3	-38.9	9.21	16	34.8	-13
L4	-38.9	9.21	16	34.8	-13
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–570. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-71.8	117.	-67.8	114.
FD	-55.2	35.5	-53.4	33.8
L1	—	—	—	—
L3	-85.4	5.43	-84.7	4.80
L4	-85.4	5.43	-84.7	4.80
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–286. Time history of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–571. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	2.32	291.	5	63.7	-52
FD	1.90E-02	228.	-6	64.4	-67
L1	—	—	—	—	—
L3	-34.7	241.	-3	42.5	-56
L4	-34.7	241.	-3	42.5	-56
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–572. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-1.58E+03	707.	-444.	379.
FD	-410.	304.	-358.	288.
L1	—	—	—	—
L3	-438.	264.	-421.	259.
L4	-438.	264.	-421.	259.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–287. Time history of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–573. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	5.85	580.	-17	42.9	-123
FD	4.88	537.	-23	74.5	156
L1	—	—	—	—	—
L3	-43.5	576.	-19	108.	141
L4	-43.5	576.	-19	108.	141
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–574. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-1.04E+03	678.	-807.	591.
FD	-978.	658.	-759.	626.
L1	—	—	—	—
L3	-1.02E+03	643.	-908.	626.
L4	-1.02E+03	643.	-908.	626.
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 45; Fn=0.0
fhst_x (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–288. Time history of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–575. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	46.1	2.00E+03	-62	85.5	-104
FD	-10.8	2.16E+03	-66	83.7	45
L1	—	—	—	—	—
L3	-48.0	2.17E+03	-62	93.7	76
L4	-48.0	2.17E+03	-62	93.7	76
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–576. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-2.29E+03	2.34E+03	-2.01E+03	2.29E+03
FD	-2.35E+03	2.54E+03	-2.24E+03	2.46E+03
L1	—	—	—	—
L3	-2.36E+03	2.53E+03	-2.31E+03	2.49E+03
L4	-2.36E+03	2.53E+03	-2.31E+03	2.49E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–289. Time history of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–577. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+ \cdots$ of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	21.3	15.1	166	8.02	-98
FD	-10.4	0.279	-4	0.716	76
L1	—	—	—	—	—
L3	-39.3	0.160	175	0.190	83
L4	-39.3	0.160	175	0.190	83
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–578. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(kN)	(kN)	(kN)	(kN)
A1	—	—	—	—
A2	-13.1	45.7	-5.42	45.8
FD	-11.3	-9.04	-11.2	-9.26
L1	—	—	—	—
L3	-39.8	-38.8	-39.8	-39.0
L4	-39.8	-38.8	-39.8	-39.0
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–290. Time history of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–579. Coefficients of the Fourier fit $a_0+a_1 \sin{(\omega t + \Phi_1)}+a_2 \sin{(2\omega t + \Phi_2)}+$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	0.196	74.1	-23	10.1	-89
FD	-12.7	5.71	-9	2.69	70
L1	—	—	—	—	—
L3	-36.7	7.58	174	3.01	-95
L4	-36.7	7.58	174	3.01	-95
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–580. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-1.47E+03	81.4	-174.	75.5
FD	-23.5	-7.90	-22.9	-8.53
L1	—	—	—	—
L3	-42.9	-24.2	-42.6	-24.3
L4	-42.9	-24.2	-42.6	-24.3
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.0
fhst_x (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–291. Time history of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–581. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-20.8	114.	-11	45.9	70
FD	-12.9	5.67	-6	1.99	80
L1	—	—	—	—	—
L3	-33.3	14.5	174	6.45	-96
L4	-33.3	14.5	174	6.45	-96
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–582. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(kN)	(kN)	(kN)	(kN)
A1	—	—	—	—
A2	-531.	72.9	-196.	65.3
FD	-22.6	-3.13	-20.3	-8.54
L1	—	—	—	—
L3	-46.0	-7.96	-45.0	-8.28
L4	-46.0	-7.96	-45.0	-8.28
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–292. Time history of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–583. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-18.1	27.7	3	18.5	69
FD	-8.39	2.89	163	3.73	-113
L1	—	—	—	—	—
L3	-26.6	18.5	175	9.55	-93
L4	-26.6	18.5	175	9.55	-93
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–584. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(kN)	(kN)	(kN)	(kN)
A1	—	—	—	—
A2	-366.	99.1	-131.	48.1
FD	-27.6	5.17	-15.5	0.708
L1	—	—	—	—
L3	-70.0	16.0	-65.7	-2.86E-02
L4	-70.0	16.0	-65.7	-2.86E-02
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–293. Time history of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–585. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	21.6	49.9	-75	28.1	-176
FD	-10.5	10.6	-27	35.3	167
L1	—	—	—	—	—
L3	-39.0	9.55	-16	35.9	175
L4	-39.0	9.55	-16	35.9	175
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–586. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-71.8	117.	-71.4	114.
FD	-55.3	35.6	-53.5	33.6
L1	—	—	—	—
L3	-85.4	5.43	-84.7	4.79
L4	-85.4	5.43	-84.7	4.79
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–294. Time history of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–587. Coefficients of the Fourier fit $a_0+a_1 \sin{(\omega t + \Phi_1)}+a_2 \sin{(2\omega t + \Phi_2)}+ \cdots$ of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	18.3	257.	-11	57.6	-159
FD	-2.72	242.	1	82.6	-174
L1	—	—	—	—	—
L3	-35.7	236.	-1	71.9	-144
L4	-35.7	236.	-1	71.9	-144
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–588. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

| | Unfiltered | | Filtered | |
| | Minimum | Maximum | Minimum | Maximum |
Code	(kN)	(kN)	(kN)	(kN)
A1	—	—	—	—
A2	-414.	355.	-363.	326.
FD	-411.	304.	-359.	288.
L1	—	—	—	—
L3	-438.	264.	-421.	259.
L4	-438.	264.	-421.	259.
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.0
fhst_x (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–295. Time history of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–589. Coefficients of the Fourier fit $a_0+a_1 \sin\left(\omega t + \Phi_1\right)+a_2 \sin\left(2\omega t + \Phi_2\right)+$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	14.7	564.	5	52.6	18
FD	11.9	546.	15	4.81	120
L1	—	—	—	—	—
L3	-36.6	547.	14	70.8	-20
L4	-36.6	547.	14	70.8	-20
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–590. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-1.07E+03	755.	-826.	574.
FD	-971.	658.	-760.	626.
L1	—	—	—	—
L3	-1.02E+03	643.	-907.	627.
L4	-1.02E+03	643.	-907.	627.
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 135; Fn=0.0
fhst_x (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–296. Time history of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–591. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	42.4	1.97E+03	49	60.8	53
FD	21.8	2.16E+03	52	91.9	146
L1	—	—	—	—	—
L3	-35.4	2.13E+03	55	35.6	41
L4	-35.4	2.13E+03	55	35.6	41
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–592. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-2.32E+03	2.34E+03	-2.12E+03	2.28E+03
FD	-2.35E+03	2.55E+03	-2.24E+03	2.46E+03
L1	—	—	—	—
L3	-2.36E+03	2.53E+03	-2.31E+03	2.49E+03
L4	-2.36E+03	2.53E+03	-2.31E+03	2.49E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 180; Fn=0.0
fhst_x (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–297. Time history of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–593. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	21.2	51.6	-80	90.6	122
FD	-10.9	16.2	-84	78.8	125
L1	—	—	—	—	—
L3	-40.1	16.0	-77	78.2	131
L4	-40.1	16.0	-77	78.2	131
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–594. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-96.8	180.	-89.6	172.
FD	-99.1	72.1	-95.8	69.1
L1	—	—	—	—
L3	-127.	42.3	-126.	40.8
L4	-127.	42.3	-126.	40.8
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 180; Fn=0.0
fhst_x (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–298. Time history of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–595. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	25.3	407.	-64	521.	148
FD	-28.2	347.	-60	485.	140
L1	—	—	—	—	—
L3	-52.2	344.	-56	476.	148
L4	-52.2	344.	-56	476.	148
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–596. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

| | Unfiltered | | Filtered | |
| | Minimum | Maximum | Minimum | Maximum |
Code	(kN)	(kN)	(kN)	(kN)
A1	—	—	—	—
A2	-683.	873.	-647.	803.
FD	-689.	704.	-661.	685.
L1	—	—	—	—
L3	-700.	664.	-691.	660.
L4	-700.	664.	-691.	660.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–299. Time history of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–597. Coefficients of the Fourier fit $a_0 + a_1 \sin (\omega t + \Phi_1) + a_2 \sin (2\omega t + \Phi_2) +$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	10.3	689.	-51	637.	136
FD	-26.7	651.	-46	650.	131
L1	—	—	—	—	—
L3	-44.3	638.	-42	623.	139
L4	-44.3	638.	-42	623.	139
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–598. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
Code	Minimum (kN)	Maximum (kN)	Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-1.17E+03	1.40E+03	-1.12E+03	1.31E+03
FD	-1.19E+03	1.15E+03	-1.14E+03	1.12E+03
L1	—	—	—	—
L3	-1.17E+03	1.10E+03	-1.16E+03	1.09E+03
L4	-1.17E+03	1.10E+03	-1.16E+03	1.09E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–300. Time history of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–599. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	141.	948.	9	873.	116
FD	-19.0	1.21E+03	20	1.12E+03	121
L1	—	—	—	—	—
L3	-39.1	1.20E+03	25	1.06E+03	129
L4	-39.1	1.20E+03	25	1.06E+03	129
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–600. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-1.78E+03	1.46E+03	-1.48E+03	1.28E+03
FD	-2.63E+03	1.52E+03	-2.45E+03	1.42E+03
L1	—	—	—	—
L3	-2.56E+03	1.46E+03	-2.45E+03	1.43E+03
L4	-2.56E+03	1.46E+03	-2.45E+03	1.43E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–301. Time history of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–601. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$,
and period = 40.02 sec in the case 0-DOF motion in waves of Model
5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	21.4	55.6	70	87.9	39
FD	-11.3	14.8	73	78.8	35
L1	—	—	—	—	—
L3	-40.2	13.3	67	80.3	39
L4	-40.2	13.3	67	80.3	39
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–602. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/60$,
$\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-96.8	180.	-96.4	179.
FD	-99.1	72.1	-98.9	71.8
L1	—	—	—	—
L3	-127.	42.3	-127.	42.1
L4	-127.	42.3	-127.	42.1
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta =   0; Fn=0.3
fhst_x (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–302. Time history of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–603. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	25.4	363.	54	525.	19
FD	-21.5	320.	51	483.	17
L1	—	—	—	—	—
L3	-40.9	298.	51	505.	20
L4	-40.9	298.	51	505.	20
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–604. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-683.	874.	-681.	850.
FD	-689.	704.	-688.	701.
L1	—	—	—	—
L3	-700.	664.	-700.	663.
L4	-700.	664.	-700.	663.
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 0; Fn=0.3
fhst_x (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–303. Time history of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–605. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$,
and period = 40.02 sec in the case 0-DOF motion in waves of Model
5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-2.07	644.	45	684.	31
FD	-16.3	621.	37	630.	27
L1	—	—	—	—	—
L3	-29.6	591.	39	617.	27
L4	-29.6	591.	39	617.	27
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–606. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/15$,
$\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-1.18E+03	1.42E+03	-1.17E+03	1.41E+03
FD	-1.19E+03	1.15E+03	-1.19E+03	1.14E+03
L1	—	—	—	—
L3	-1.17E+03	1.10E+03	-1.17E+03	1.10E+03
L4	-1.17E+03	1.10E+03	-1.17E+03	1.10E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–304. Time history of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–607. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	132.	977.	-20	922.	46
FD	-19.4	1.21E+03	-30	1.11E+03	39
L1	—	—	—	—	—
L3	-29.0	1.21E+03	-31	1.07E+03	41
L4	-29.0	1.21E+03	-31	1.07E+03	41
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–608. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-1.83E+03	1.47E+03	-1.72E+03	1.45E+03
FD	-2.63E+03	1.52E+03	-2.59E+03	1.51E+03
L1	—	—	—	—
L3	-2.56E+03	1.46E+03	-2.54E+03	1.45E+03
L4	-2.56E+03	1.46E+03	-2.54E+03	1.45E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–305. Time history of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–609. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	19.9	48.5	79	32.3	9
FD	-10.1	9.84	28	35.1	8
L1	—	—	—	—	—
L3	-39.5	9.07	21	35.6	2
L4	-39.5	9.07	21	35.6	2
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–610. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(kN)	(kN)	(kN)	(kN)
A1	—	—	—	—
A2	-71.8	117.	-70.9	117.
FD	-55.3	35.5	-54.9	35.1
L1	—	—	—	—
L3	-85.4	5.43	-85.2	5.30
L4	-85.4	5.43	-85.2	5.30
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 45; Fn=0.3
fhst_x (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–306. Time history of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–611. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	15.2	258.	10	76.1	-29
FD	-11.8	235.	5	75.9	-11
L1	—	—	—	—	—
L3	-35.8	229.	2	68.1	-22
L4	-35.8	229.	2	68.1	-22
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–612. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-542.	698.	-390.	375.
FD	-411.	304.	-399.	300.
L1	—	—	—	—
L3	-438.	264.	-434.	263.
L4	-438.	264.	-434.	263.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–307. Time history of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–613. Coefficients of the Fourier fit $a_0+a_1\sin\left(\omega t+\Phi_1\right)+a_2\sin\left(2\omega t+\Phi_2\right)+\cdots$ of F_x^{hst} for one period for $H/\lambda=1/15$, $\lambda/L=1$, $\beta=45°$, $F_n=0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	10.5	581.	-10	34.0	-119
FD	-15.6	542.	-11	23.2	116
L1	—	—	—	—	—
L3	-29.5	544.	-15	39.5	167
L4	-29.5	544.	-15	39.5	167
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–614. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda=1/15$, $\lambda/L=1$, $\beta=45°$, $F_n=0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-1.05E+03	668.	-957.	624.
FD	-978.	658.	-910.	642.
L1	—	—	—	—
L3	-1.01E+03	643.	-988.	635.
L4	-1.01E+03	643.	-988.	635.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–308. Time history of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–615. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n =$
0.3, and period = 21.23 sec in the case 0-DOF motion in waves of Model
5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	40.5	2.01E+03	-54	77.0	-73
FD	-28.8	2.13E+03	-53	125.	24
L1	—	—	—	—	—
L3	-20.7	2.16E+03	-57	32.8	-17
L4	-20.7	2.16E+03	-57	32.8	-17
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–616. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/10$,
$\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-2.31E+03	2.34E+03	-2.20E+03	2.32E+03
FD	-2.36E+03	2.54E+03	-2.33E+03	2.51E+03
L1	—	—	—	—
L3	-2.36E+03	2.53E+03	-2.34E+03	2.51E+03
L4	-2.36E+03	2.53E+03	-2.34E+03	2.51E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–309. Time history of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–617. Coefficients of the Fourier fit $a_0+a_1\sin(\omega t + \Phi_1)+a_2\sin(2\omega t + \Phi_2)+$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	21.3	15.1	166	8.02	-98
FD	-10.4	0.279	-4	0.717	76
L1	—	—	—	—	—
L3	-39.3	0.160	175	0.190	83
L4	-39.3	0.160	175	0.190	83
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–618. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-13.1	45.7	-5.42	45.8
FD	-11.3	-9.04	-11.2	-9.26
L1	—	—	—	—
L3	-39.8	-38.8	-39.8	-39.0
L4	-39.8	-38.8	-39.8	-39.0
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.3
fhst_x (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–310. Time history of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–619. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	0.196	74.1	-23	10.1	-89
FD	-12.7	5.71	-9	2.69	70
L1	—	—	—	—	—
L3	-36.7	7.58	174	3.01	-95
L4	-36.7	7.58	174	3.01	-95
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–620. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-1.47E+03	81.4	-174.	75.5
FD	-23.5	-7.90	-22.9	-8.53
L1	—	—	—	—
L3	-42.9	-24.2	-42.6	-24.3
L4	-42.9	-24.2	-42.6	-24.3
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–311. Time history of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–621. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-16.9	108.	-9	42.9	78
FD	-12.9	5.67	-6	1.99	80
L1	—	—	—	—	—
L3	-33.3	14.5	174	6.45	-96
L4	-33.3	14.5	174	6.45	-96
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–622. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

| Code | Unfiltered | | Filtered | |
	Minimum (kN)	Maximum (kN)	Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-181.	72.9	-173.	65.6
FD	-22.6	-3.13	-20.3	-8.54
L1	—	—	—	—
L3	-46.0	-7.96	-45.0	-8.28
L4	-46.0	-7.96	-45.0	-8.28
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–312. Time history of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–623. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-18.1	27.7	3	18.5	69
FD	-8.39	2.89	163	3.73	-113
L1	—	—	—	—	—
L3	-26.6	18.5	175	9.55	-93
L4	-26.6	18.5	175	9.55	-93
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–624. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-366.	99.1	-131.	48.1
FD	-27.6	5.17	-15.5	0.709
L1	—	—	—	—
L3	-70.0	16.0	-65.7	-2.86E-02
L4	-70.0	16.0	-65.7	-2.86E-02
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.3
fhst_x (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–313. Time history of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–625. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	21.1	48.7	-78	28.2	-180
FD	-10.0	10.8	-17	34.8	-172
L1	—	—	—	—	—
L3	-39.5	9.42	-16	33.9	176
L4	-39.5	9.42	-16	33.9	176
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–626. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

| | Unfiltered | | Filtered | |
| | Minimum | Maximum | Minimum | Maximum |
Code	(kN)	(kN)	(kN)	(kN)
A1	—	—	—	—
A2	-71.7	117.	-69.5	110.
FD	-55.3	35.5	-51.0	30.9
L1	—	—	—	—
L3	-85.4	5.43	-83.8	3.91
L4	-85.4	5.43	-83.8	3.91
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–314. Time history of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–627. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	14.1	245.	-11	55.1	-168
FD	-3.55	250.	8	60.9	-138
L1	—	—	—	—	—
L3	-32.0	233.	3	45.9	-161
L4	-32.0	233.	3	45.9	-161
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–628. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-398.	354.	-298.	310.
FD	-411.	304.	-341.	267.
L1	—	—	—	—
L3	-438.	264.	-389.	260.
L4	-438.	264.	-389.	260.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–315. Time history of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–629. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	4.01	542.	6	57.7	31
FD	-2.47	566.	22	61.2	31
L1	—	—	—	—	—
L3	-21.9	547.	16	73.5	34
L4	-21.9	547.	16	73.5	34
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–630. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-1.05E+03	642.	-645.	536.
FD	-978.	649.	-614.	593.
L1	—	—	—	—
L3	-1.01E+03	643.	-814.	616.
L4	-1.01E+03	643.	-814.	616.
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 135; Fn=0.3
fhst_x (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–316. Time history of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–631. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	24.4	2.00E+03	48	80.7	82
FD	-5.01	2.17E+03	61	126.	112
L1	—	—	—	—	—
L3	2.01	2.14E+03	55	128.	113
L4	2.01	2.14E+03	55	128.	113
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–632. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-2.30E+03	2.34E+03	-2.07E+03	2.21E+03
FD	-2.35E+03	2.52E+03	-2.18E+03	2.42E+03
L1	—	—	—	—
L3	-2.35E+03	2.53E+03	-2.26E+03	2.46E+03
L4	-2.35E+03	2.53E+03	-2.26E+03	2.46E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 180; Fn=0.3
fhst_x (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–317. Time history of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–633. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	21.5	51.8	-85	90.5	110
FD	-10.3	14.9	-111	80.6	67
L1	—	—	—	—	—
L3	-40.2	16.2	-87	78.1	108
L4	-40.2	16.2	-87	78.1	108
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–634. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-96.6	179.	-76.0	156.
FD	-99.0	71.6	-87.8	64.7
L1	—	—	—	—
L3	-127.	42.2	-123.	39.4
L4	-127.	42.2	-123.	39.4
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–318. Time history of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–635. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	25.8	401.	-69	515.	135
FD	-25.5	334.	-92	514.	87
L1	—	—	—	—	—
L3	-46.1	333.	-68	486.	126
L4	-46.1	333.	-68	486.	126
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–636. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-682.	852.	-581.	772.
FD	-686.	703.	-604.	657.
L1	—	—	—	—
L3	-700.	664.	-670.	650.
L4	-700.	664.	-670.	650.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–319. Time history of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–637. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of F_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$,
$F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	0.746	680.	-59	645.	124
FD	-21.0	631.	-76	663.	78
L1	—	—	—	—	—
L3	-27.6	606.	-53	647.	118
L4	-27.6	606.	-53	647.	118
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–638. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/15$,
$\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-1.17E+03	1.41E+03	-1.02E+03	1.21E+03
FD	-1.19E+03	1.15E+03	-1.05E+03	1.08E+03
L1	—	—	—	—
L3	-1.17E+03	1.10E+03	-1.12E+03	1.07E+03
L4	-1.17E+03	1.10E+03	-1.12E+03	1.07E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–320. Time history of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–639. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} + \cdots$ of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	93.8	975.	6	867.	104
FD	-23.6	1.19E+03	-9	1.14E+03	65
L1	—	—	—	—	—
L3	-38.9	1.20E+03	14	1.06E+03	106
L4	-38.9	1.20E+03	14	1.06E+03	106
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–640. Minimum and maximum of of F_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-1.81E+03	1.44E+03	-1.60E+03	1.13E+03
FD	-2.62E+03	1.51E+03	-2.23E+03	1.27E+03
L1	—	—	—	—
L3	-2.56E+03	1.46E+03	-2.36E+03	1.37E+03
L4	-2.56E+03	1.46E+03	-2.36E+03	1.37E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 0; Fn=0.0
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–321. Time history of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–641. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-3.61E-06	8.93E-06	110	5.53E-06	114
FD	-6.27E-06	3.56E-06	84	1.24E-06	-160
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.03E-04	2.13E-04	45	7.99E-05	107

Table G–642. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-1.81E-04	9.62E-05	-7.19E-05	2.56E-05
FD	-2.40E-05	1.50E-05	-1.39E-05	5.16E-06
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-2.27E-03	1.58E-03	-7.15E-04	4.66E-04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.0
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–322. Time history of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–643. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-0.532	51.0	80	98.0	-15
FD	4.41E-07	8.56E-06	164	2.78E-05	161
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.94E-04	7.84E-05	26	5.17E-04	179

Table G–644. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-2.43E+03	2.81E+03	-323.	375.
FD	-6.31E-05	9.31E-05	-3.31E-05	5.65E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-2.76E-03	2.11E-03	-1.32E-03	5.40E-04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 0; Fn=0.0
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–323. Time history of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–645. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} + \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	14.9	31.9	70	37.1	45
FD	2.49E-06	1.07E-05	104	2.31E-05	146
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.11E-04	1.83E-04	124	5.75E-04	89

Table G–646. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-1.37E-03	2.84E+03	-32.3	378.
FD	-5.92E-05	7.36E-05	-3.10E-05	3.42E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-3.88E-03	3.68E-03	-2.79E-03	1.32E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 0; Fn=0.0
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–324. Time history of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–647. Coefficients of the Fourier fit $a_0+a_1 \sin (\omega t + \Phi_1)+a_2 \sin (2\omega t + \Phi_2)+ \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	2.45	4.77	112	5.08	138
FD	-3.81E-06	2.82E-05	-173	2.56E-05	157
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–648. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-8.58E-02	275.	-3.22	37.8
FD	-1.47E-04	1.09E-04	-8.51E-05	6.55E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 45; Fn=0.0
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–325. Time history of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–649. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
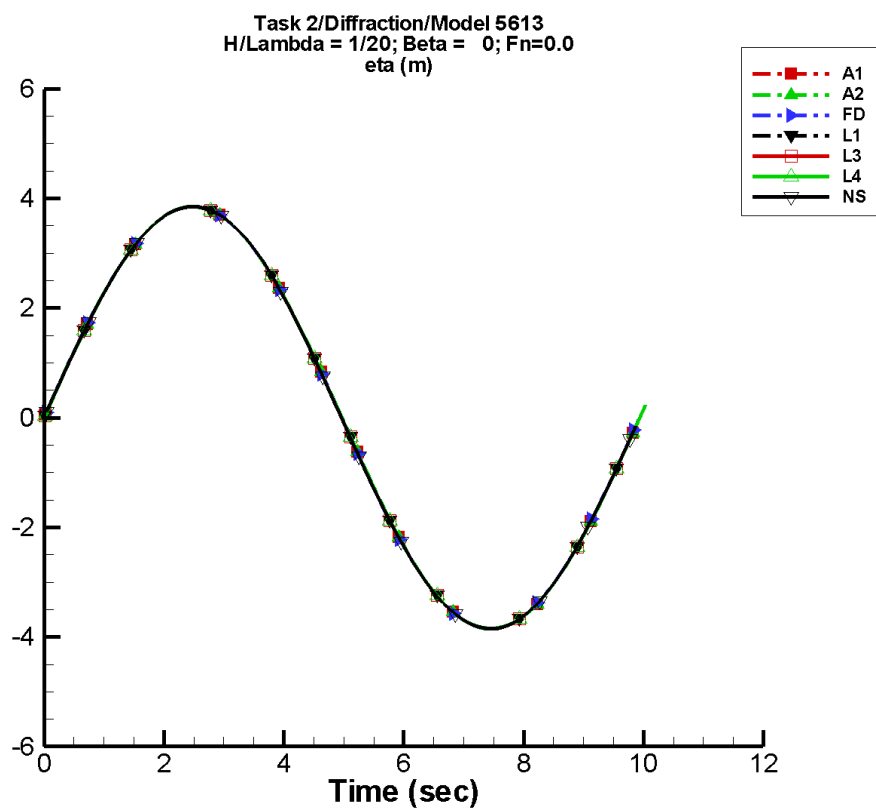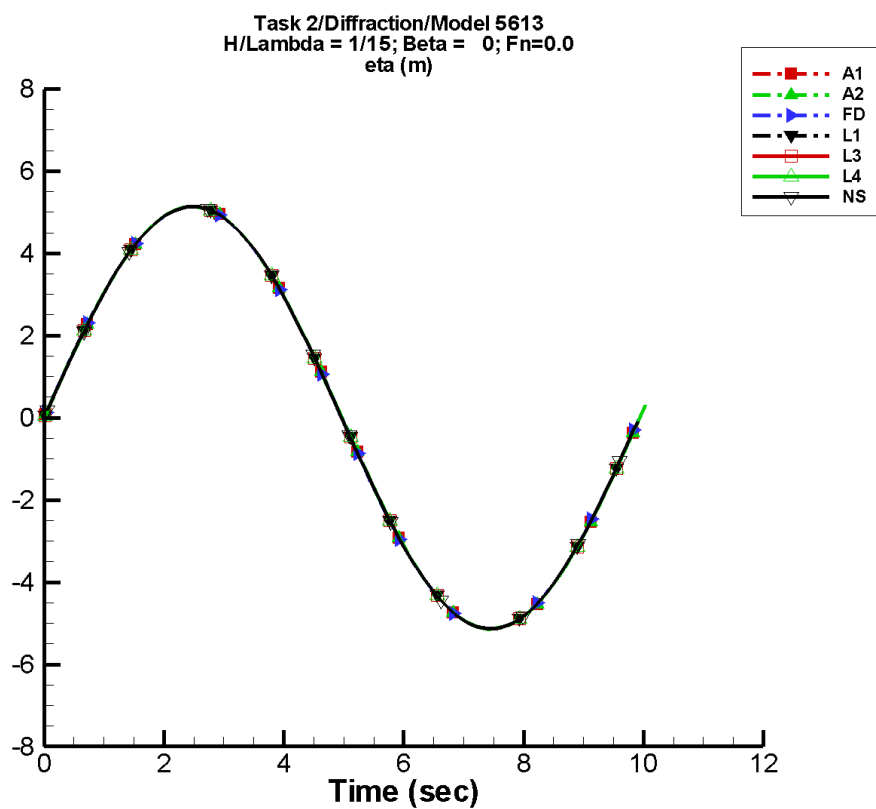
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	8.89E-02	70.8	-80	88.3	70
FD	0.452	7.87	15	36.9	-21
L1	—	—	—	—	—
L3	0.455	8.80	19	35.0	-13
L4	0.455	8.80	19	35.0	-13
NF	—	—	—	—	—
NS	-0.390	2.06	-76	26.3	-53

Table G–650. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-454.	267.	-393.	212.
FD	-52.6	50.3	-48.7	44.1
L1	—	—	—	—
L3	-45.4	44.7	-44.6	44.1
L4	-45.4	44.7	-44.6	44.1
NF	—	—	—	—
NS	-29.5	26.6	-28.4	25.4

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–326. Time history of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
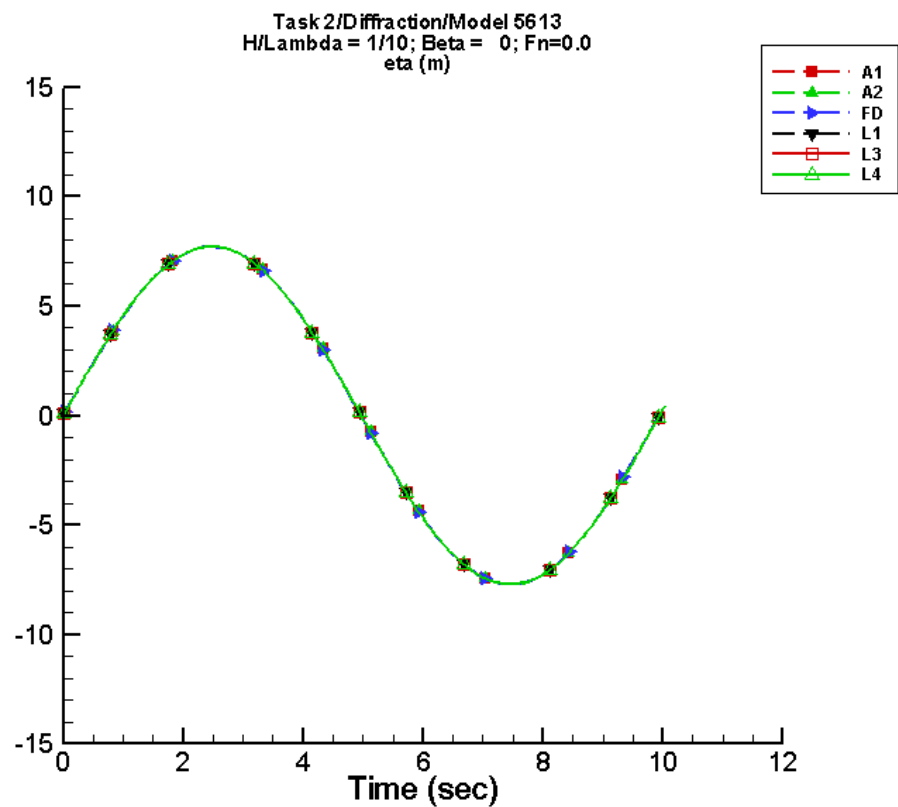
Table G–651. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	23.7	243.	-12	160.	-49
FD	12.7	219.	-5	67.7	-69
L1	—	—	—	—	—
L3	2.06	238.	0	46.1	-61
L4	2.06	238.	0	46.1	-61
NF	—	—	—	—	—
NS	-23.5	124.	-24	157.	-104

Table G–652. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

| | Unfiltered | | Filtered | |
| | Minimum | Maximum | Minimum | Maximum |
Code	(kN)	(kN)	(kN)	(kN)
A1	—	—	—	—
A2	-1.93E+03	2.90E+03	-436.	745.
FD	-398.	310.	-343.	295.
L1	—	—	—	—
L3	-415.	303.	-393.	299.
L4	-415.	303.	-393.	299.
NF	—	—	—	—
NS	-373.	195.	-332.	185.

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–327. Time history of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
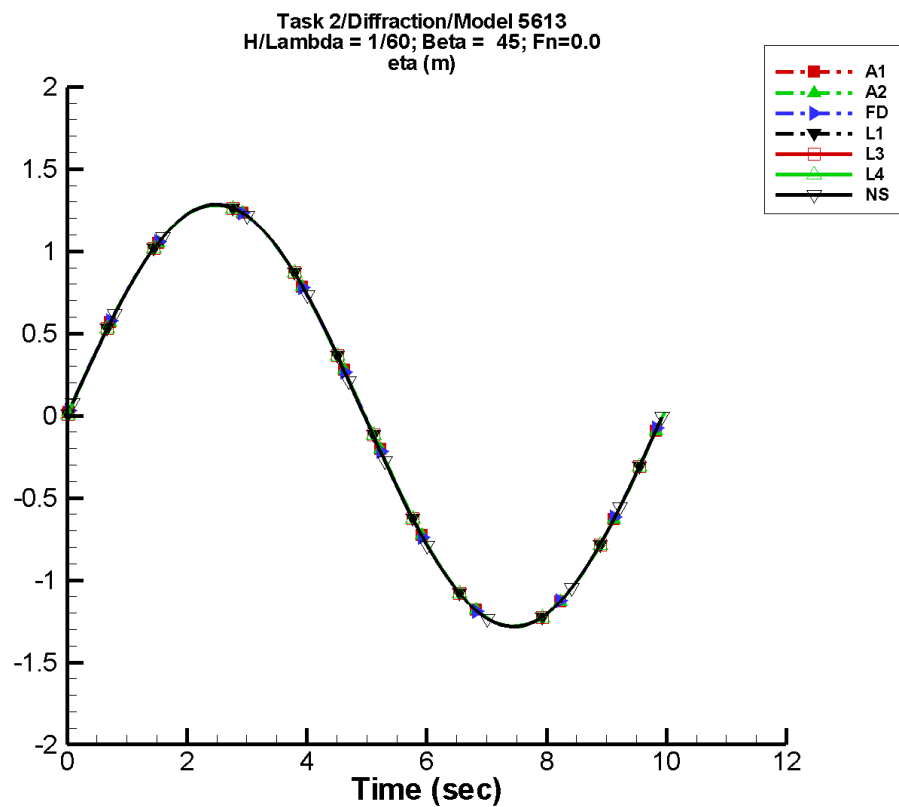
Table G–653. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	79.5	570.	-21	203.	-48
FD	18.2	526.	-22	78.4	160
L1	—	—	—	—	—
L3	-10.2	568.	-17	106.	145
L4	-10.2	568.	-17	106.	145
NF	—	—	—	—	—
NS	-54.5	316.	-54	470.	-149

Table G–654. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-938.	3.05E+03	-579.	957.
FD	-991.	652.	-756.	621.
L1	—	—	—	—
L3	-993.	656.	-883.	638.
L4	-993.	656.	-883.	638.
NF	—	—	—	—
NS	-966.	511.	-870.	495.

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 45; Fn=0.0
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–328. Time history of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
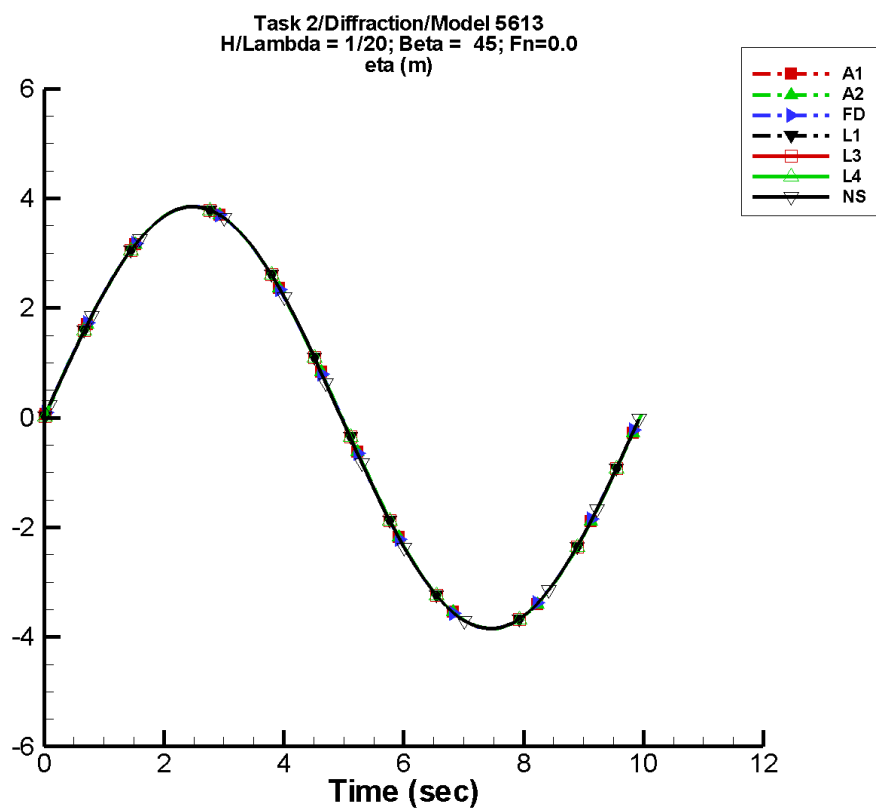
Table G–655. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	81.7	2.08E+03	-69	176.	-172
FD	-0.809	2.15E+03	-66	81.1	43
L1	—	—	—	—	—
L3	-20.7	2.15E+03	-62	84.6	78
L4	-20.7	2.15E+03	-62	84.6	78
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–656. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

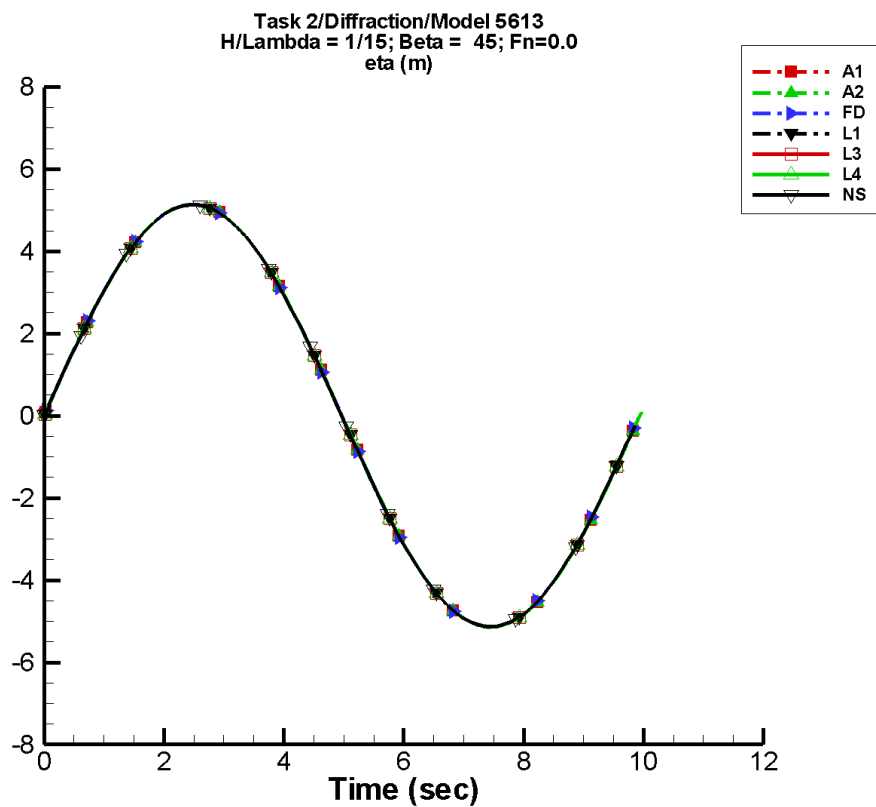| Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-2.37E+03	2.88E+03	-2.10E+03	2.47E+03
FD	-2.36E+03	2.59E+03	-2.23E+03	2.46E+03
L1	—	—	—	—
L3	-2.37E+03	2.53E+03	-2.28E+03	2.49E+03
L4	-2.37E+03	2.53E+03	-2.28E+03	2.49E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.0
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–329. Time history of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
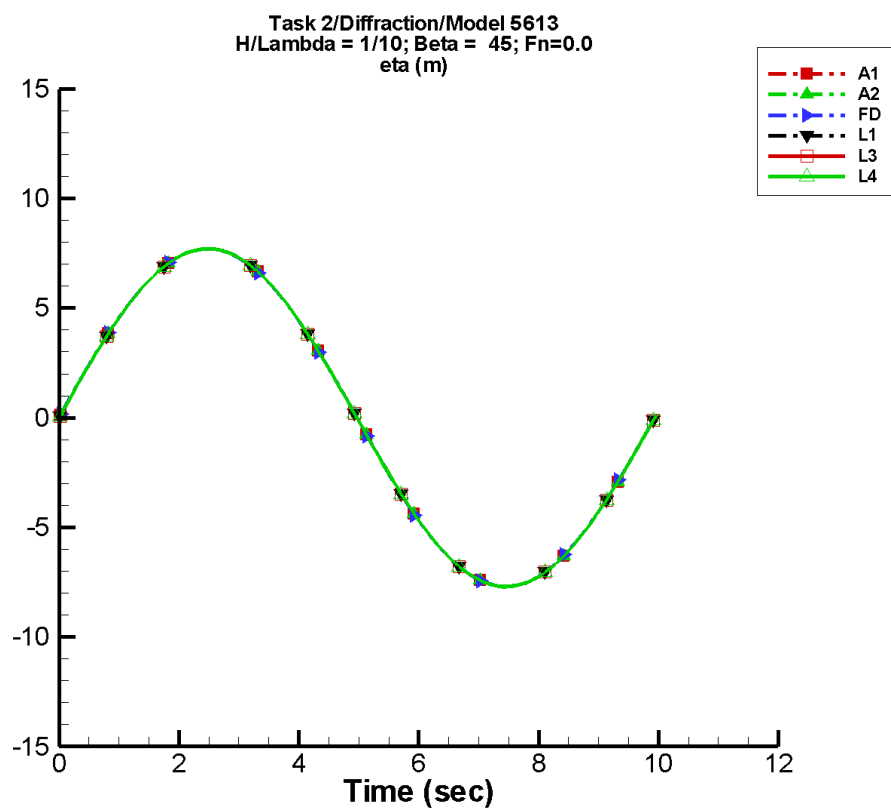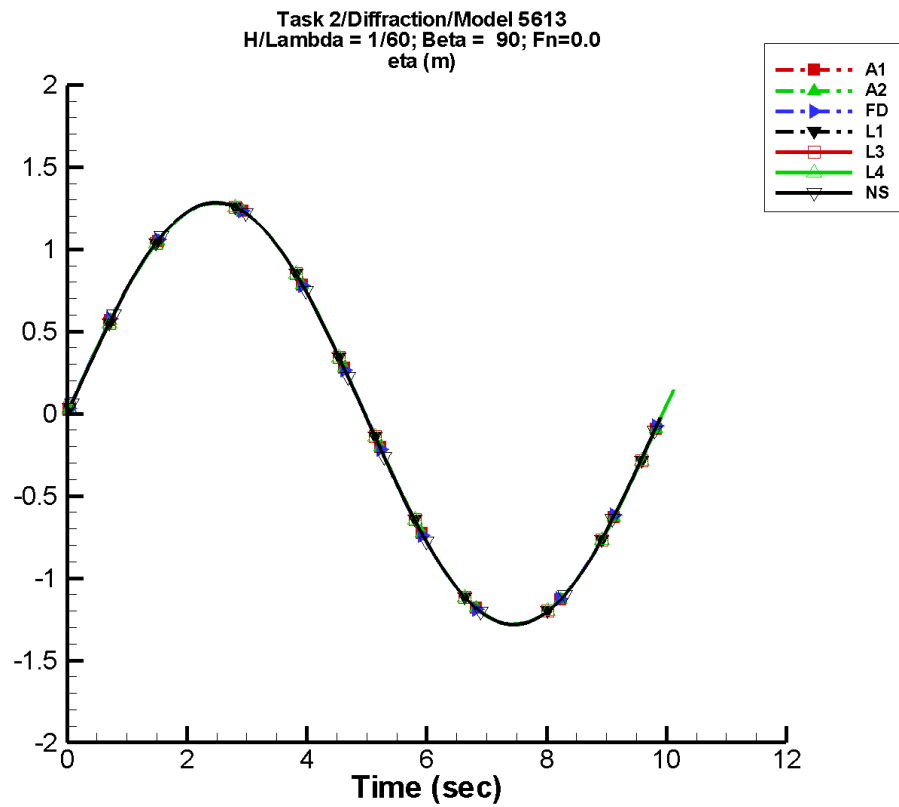
Table G–657. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-2.90	78.1	-141	817.	158
FD	0.415	17.6	-101	680.	165
L1	—	—	—	—	—
L3	-0.417	18.2	-96	677.	172
L4	-0.417	18.2	-96	677.	172
NF	—	—	—	—	—
NS	-0.587	8.02	-93	560.	172

Table G–658. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-1.33E+03	1.33E+03	-1.26E+03	1.26E+03
FD	-696.	697.	-669.	668.
L1	—	—	—	—
L3	-697.	697.	-688.	687.
L4	-697.	697.	-688.	687.
NF	—	—	—	—
NS	-567.	567.	-546.	544.

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.0
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–330. Time history of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–659. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	32.3	705.	-103	5.23E+03	165
FD	14.4	534.	-102	5.42E+03	165
L1	—	—	—	—	—
L3	-4.45	509.	-96	5.42E+03	172
L4	-4.45	509.	-96	5.42E+03	172
NF	—	—	—	—	—
NS	-38.9	311.	-92	4.58E+03	172

Table G–660. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
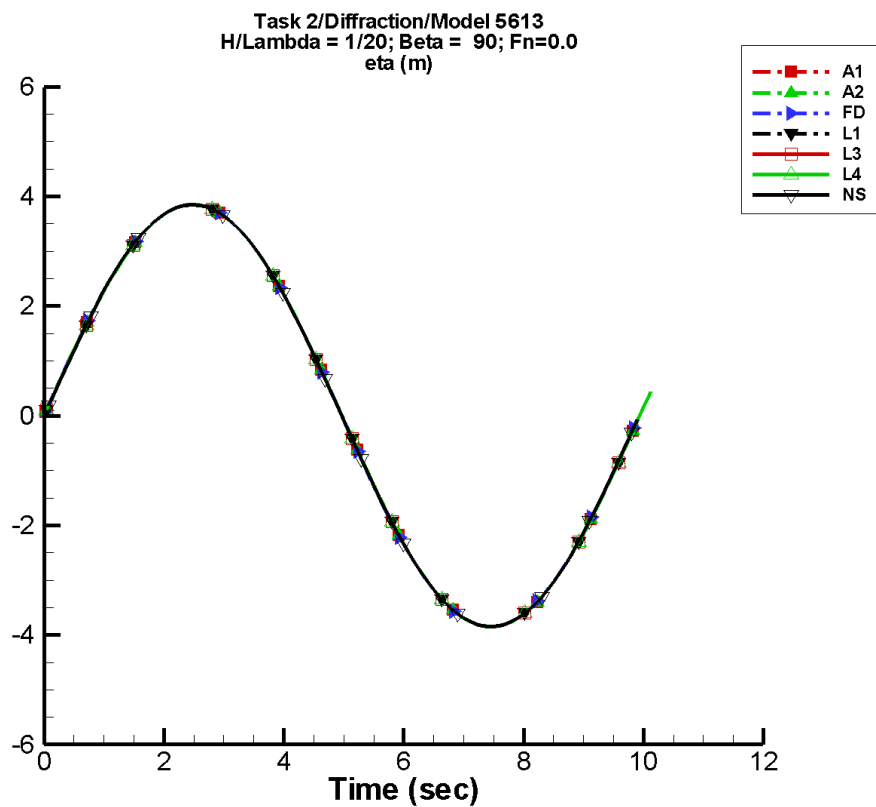
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-6.33E+03	6.30E+03	-5.69E+03	5.66E+03
FD	-6.04E+03	6.04E+03	-5.81E+03	5.81E+03
L1	—	—	—	—
L3	-6.01E+03	6.01E+03	-5.93E+03	5.93E+03
L4	-6.01E+03	6.01E+03	-5.93E+03	5.93E+03
NF	—	—	—	—
NS	-4.96E+03	4.94E+03	-4.77E+03	4.74E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.0
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–331. Time history of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

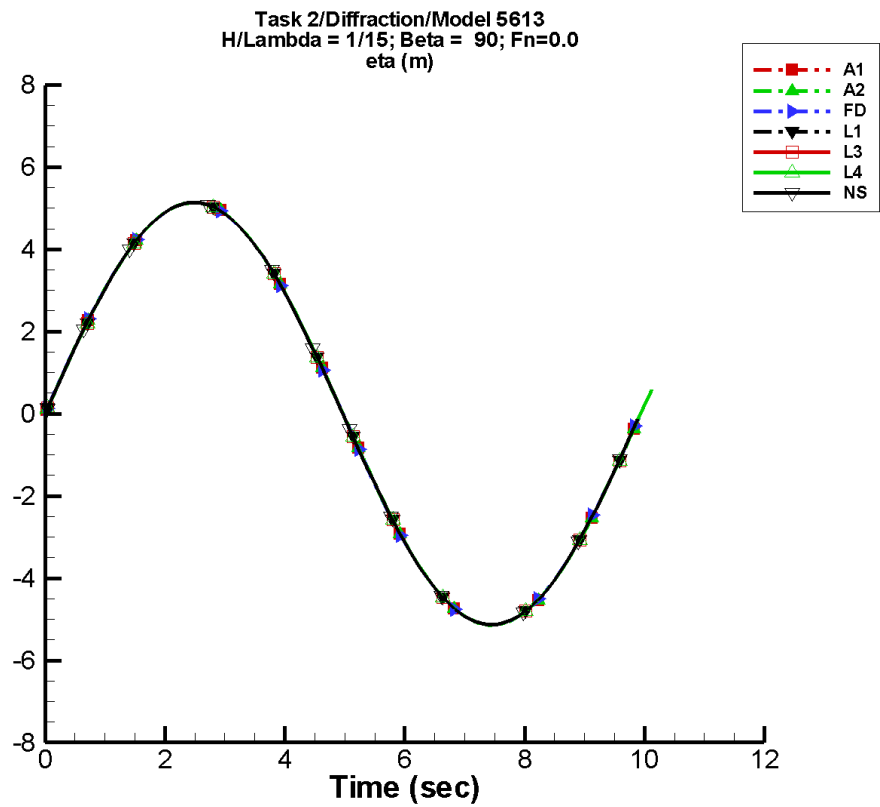Table G–661. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	3.62	1.17E+03	-100	8.59E+03	164
FD	42.3	1.38E+03	-103	8.88E+03	166
L1	—	—	—	—	—
L3	-10.2	1.34E+03	-96	8.88E+03	172
L4	-10.2	1.34E+03	-96	8.88E+03	172
NF	—	—	—	—	—
NS	-88.4	707.	-90	7.26E+03	173

Table G–662. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

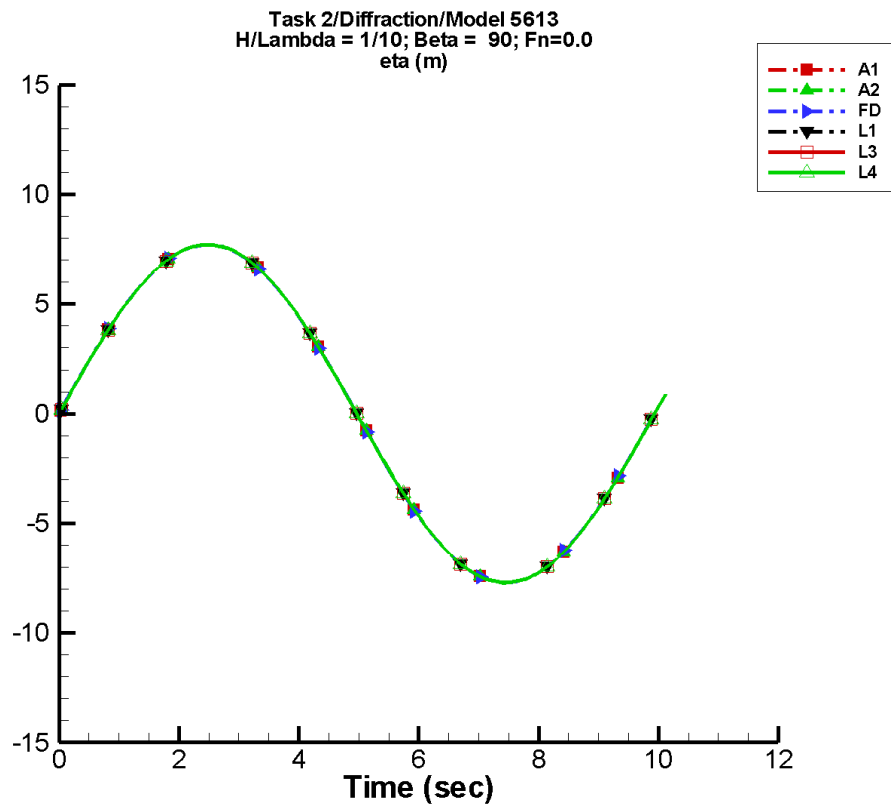| Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-9.64E+03	9.86E+03	-9.31E+03	9.29E+03
FD	-1.05E+04	1.05E+04	-1.01E+04	1.01E+04
L1	—	—	—	—
L3	-1.05E+04	1.05E+04	-1.03E+04	1.03E+04
L4	-1.05E+04	1.05E+04	-1.03E+04	1.03E+04
NF	—	—	—	—
NS	-8.16E+03	8.12E+03	-7.96E+03	7.93E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.0
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–332. Time history of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
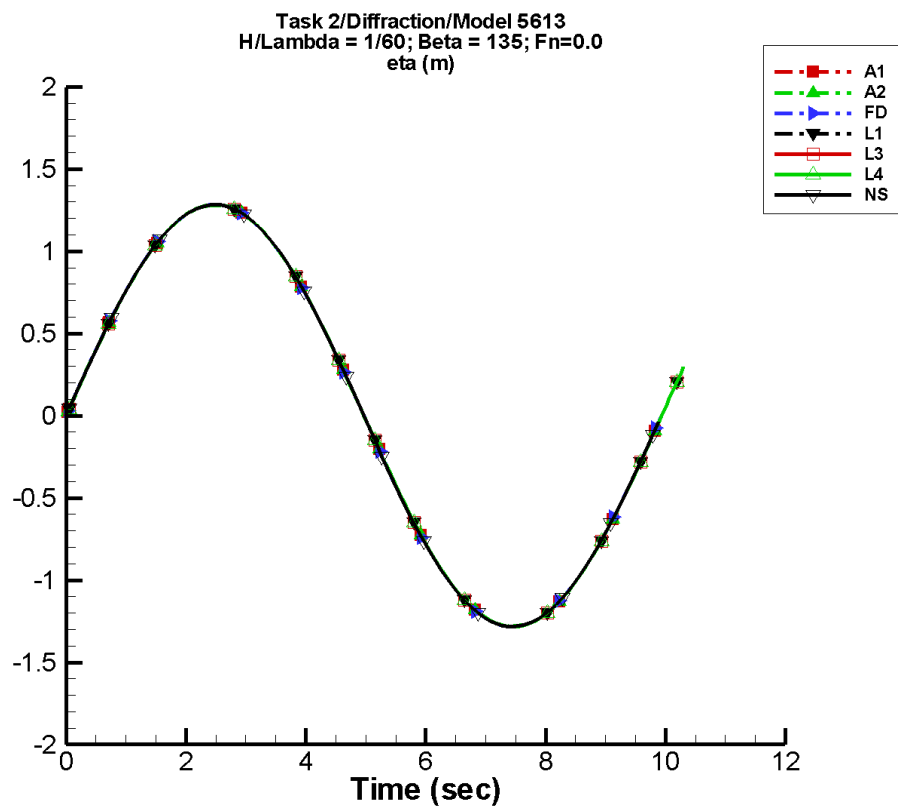
Table G–663. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-3.63	5.99E+03	-102	1.47E+04	162
FD	182.	5.91E+03	-104	1.49E+04	168
L1	—	—	—	—	—
L3	-76.9	5.84E+03	-96	1.48E+04	171
L4	-76.9	5.84E+03	-96	1.48E+04	171
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–664. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-2.27E+04	2.24E+04	-2.16E+04	2.15E+04
FD	-2.27E+04	2.27E+04	-2.17E+04	2.17E+04
L1	—	—	—	—
L3	-2.26E+04	2.26E+04	-2.22E+04	2.22E+04
L4	-2.26E+04	2.26E+04	-2.22E+04	2.22E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.0
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–333. Time history of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
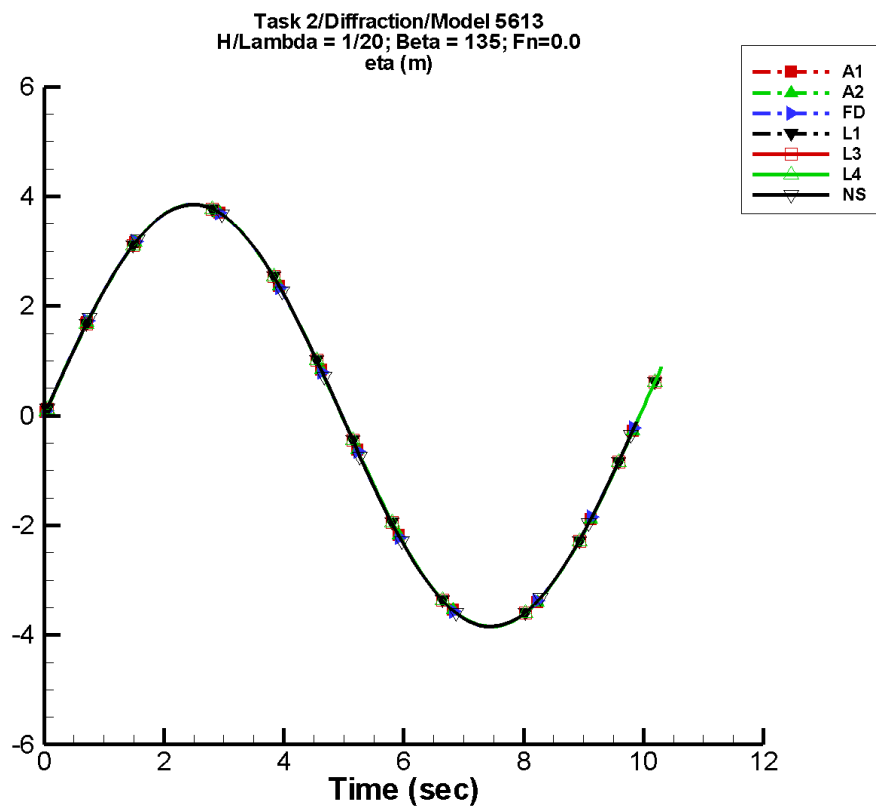
Table G–665. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-6.73	94.8	-132	43.2	-111
FD	0.201	9.86	158	36.7	-15
L1	—	—	—	—	—
L3	-0.307	9.12	162	36.0	-5
L4	-0.307	9.12	162	36.0	-5
NF	—	—	—	—	—
NS	-0.469	2.40	-103	26.0	38

Table G–666. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

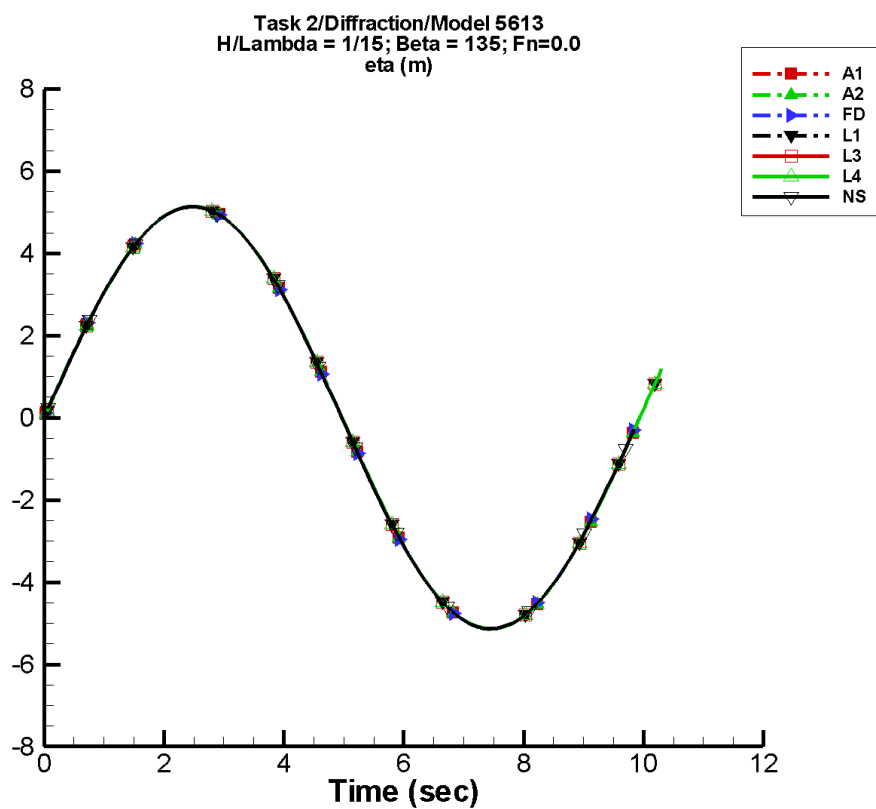| Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-268.	457.	-214.	393.
FD	-50.4	52.5	-44.2	48.8
L1	—	—	—	—
L3	-44.7	45.4	-44.1	44.6
L4	-44.7	45.4	-44.1	44.6
NF	—	—	—	—
NS	-27.8	28.8	-26.7	27.7

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–334. Time history of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
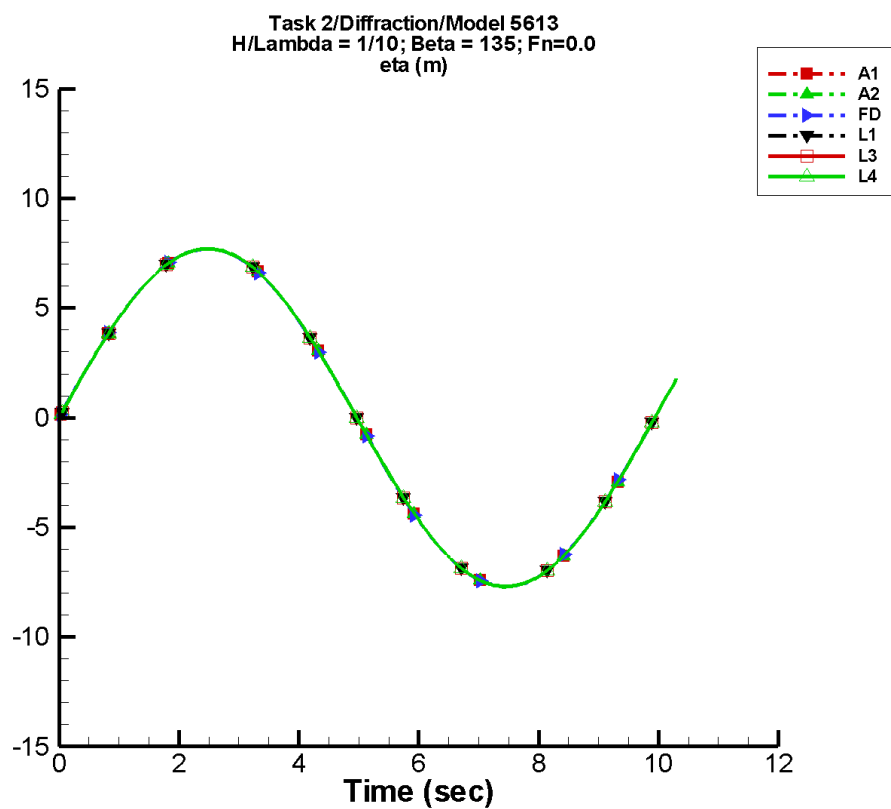
Table G–667. Coefficients of the Fourier fit $a_0+a_1\sin{(\omega t + \Phi_1)}+a_2\sin{(2\omega t + \Phi_2)}+$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	16.8	229.	-159	151.	22
FD	-9.52	234.	-180	84.2	7
L1	—	—	—	—	—
L3	-0.987	233.	177	75.2	39
L4	-0.987	233.	177	75.2	39
NF	—	—	—	—	—
NS	-31.6	131.	-139	139.	94

Table G–668. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-367.	2.83E+03	-320.	518.
FD	-311.	401.	-295.	342.
L1	—	—	—	—
L3	-304.	415.	-298.	393.
L4	-304.	415.	-298.	393.
NF	—	—	—	—
NS	-259.	298.	-218.	246.

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–335. Time history of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
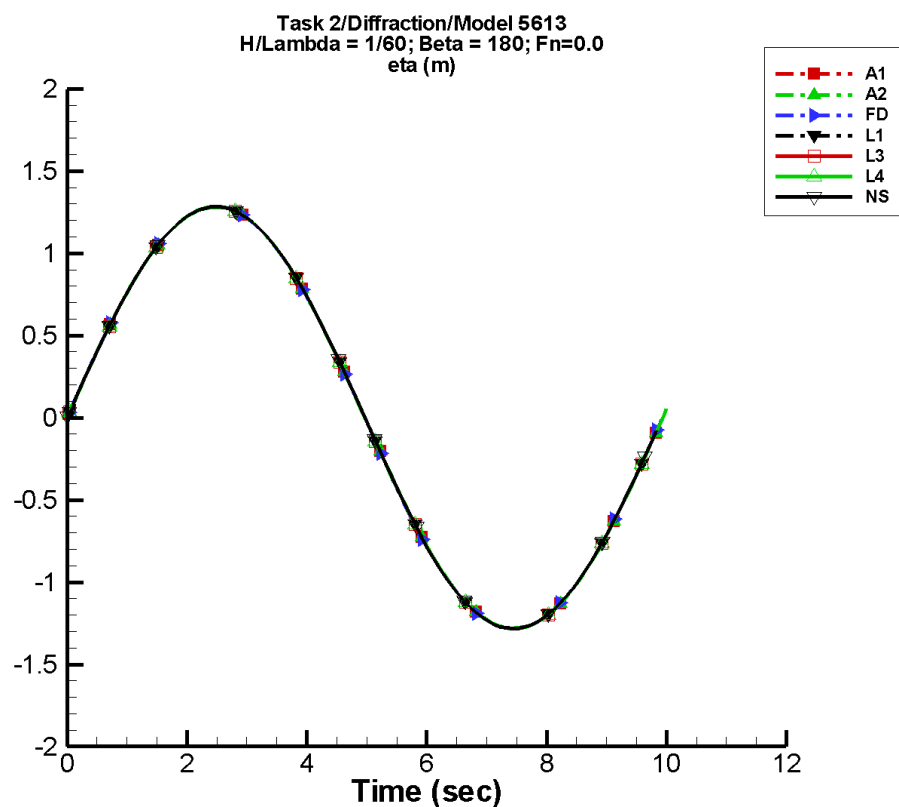
Table G–669. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-52.1	510.	177	165.	-3
FD	-25.3	534.	-165	1.51	96
L1	—	—	—	—	—
L3	3.15	538.	-168	74.7	155
L4	3.15	538.	-168	74.7	155
NF	—	—	—	—	—
NS	-58.8	309.	-106	427.	145

Table G–670. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-3.05E+03	1.31E+03	-939.	672.
FD	-652.	968.	-622.	759.
L1	—	—	—	—
L3	-653.	993.	-638.	883.
L4	-653.	993.	-638.	883.
NF	—	—	—	—
NS	-722.	756.	-647.	711.

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 135; Fn=0.0
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–336. Time history of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
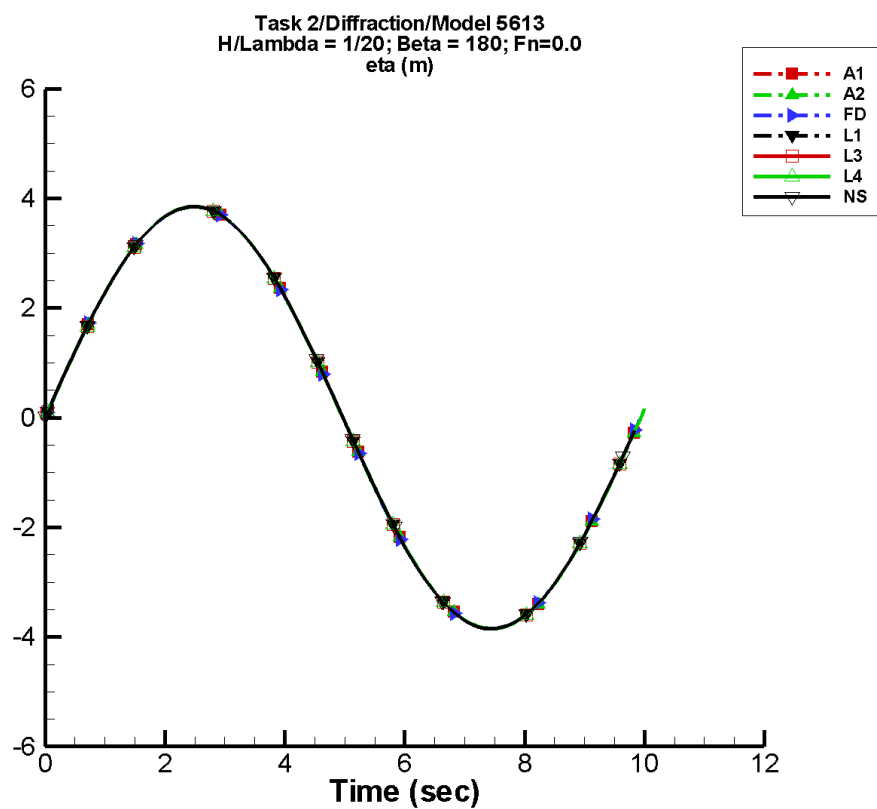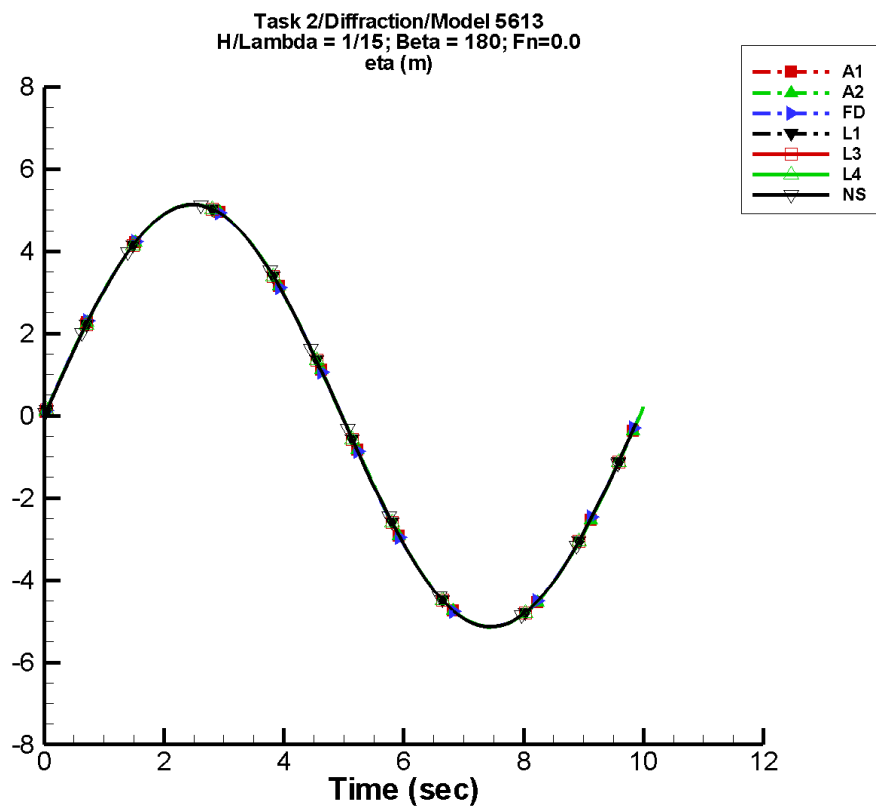
Table G–671. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-58.0	2.06E+03	-125	174.	168
FD	-29.9	2.15E+03	-128	90.6	-30
L1	—	—	—	—	—
L3	8.71	2.11E+03	-125	32.6	-154
L4	8.71	2.11E+03	-125	32.6	-154
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–672. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-2.60E+03	2.55E+03	-2.47E+03	2.13E+03
FD	-2.58E+03	2.36E+03	-2.46E+03	2.24E+03
L1	—	—	—	—
L3	-2.53E+03	2.38E+03	-2.49E+03	2.28E+03
L4	-2.53E+03	2.38E+03	-2.49E+03	2.28E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–337. Time history of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
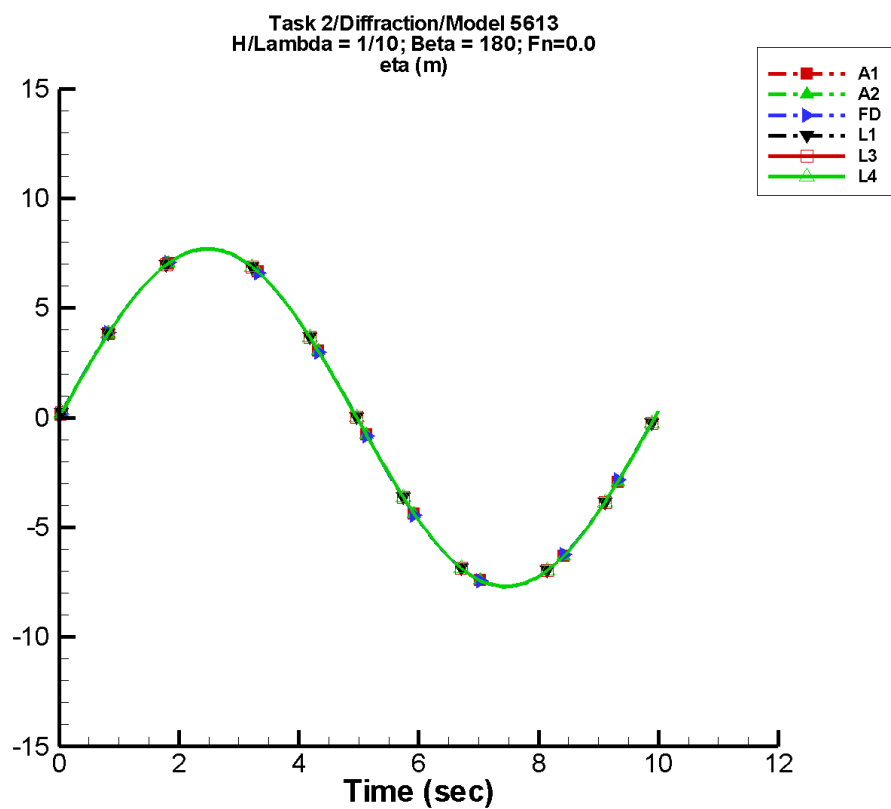
Table G–673. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-4.02E-06	1.93E-05	178	1.42E-05	65
FD	2.21E-05	2.49E-05	-60	7.56E-06	-124
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-7.78E-05	2.21E-04	-78	1.16E-04	122

Table G–674. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
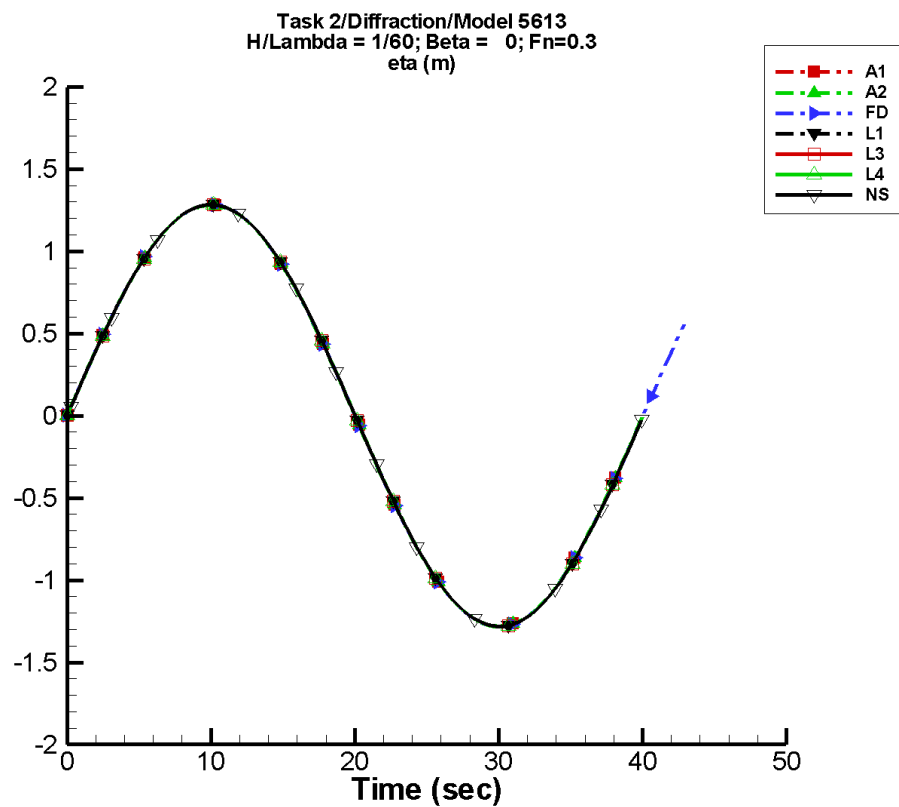
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-1.71E-04	1.32E-04	-1.13E-04	4.57E-05
FD	-4.07E-04	3.74E-04	-1.16E-05	8.12E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.50E-03	1.69E-03	-6.90E-04	5.07E-04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–338. Time history of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–675. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} + \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	80.7	61.9	32	87.1	132
FD	3.12E-03	7.53E-04	74	4.42E-03	-99
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.11E-04	2.94E-04	108	5.34E-04	-17

Table G–676. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

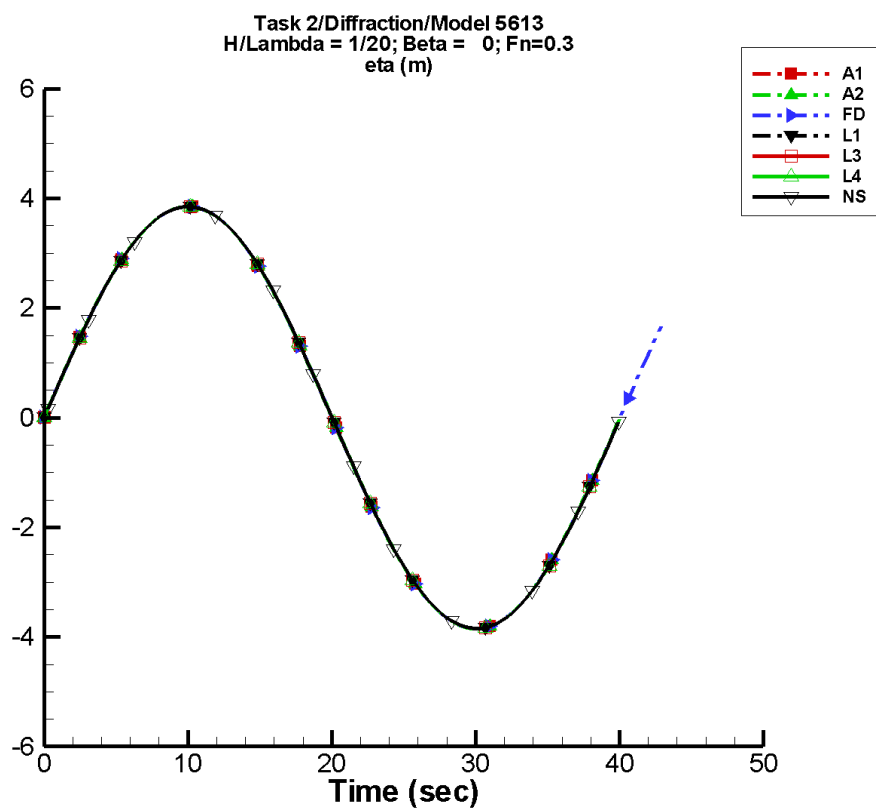| Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-3.23E-04	4.75E+03	-74.1	627.
FD	-1.49E-02	1.09E-02	-8.31E-04	9.95E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-2.54E-03	2.41E-03	-1.32E-03	8.48E-04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 180; Fn=0.0
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–339. Time history of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
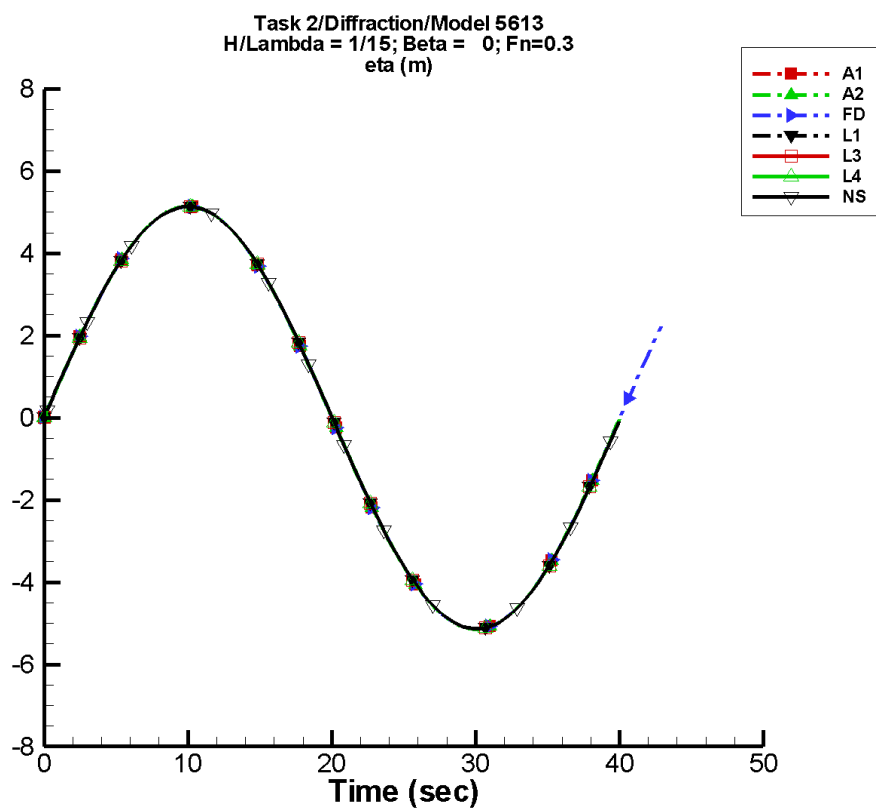
Table G–677. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-19.5	53.7	-150	78.4	173
FD	3.29E-03	2.41E-03	-13	2.74E-03	-116
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.45E-04	2.48E-04	-77	4.72E-04	95

Table G–678. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

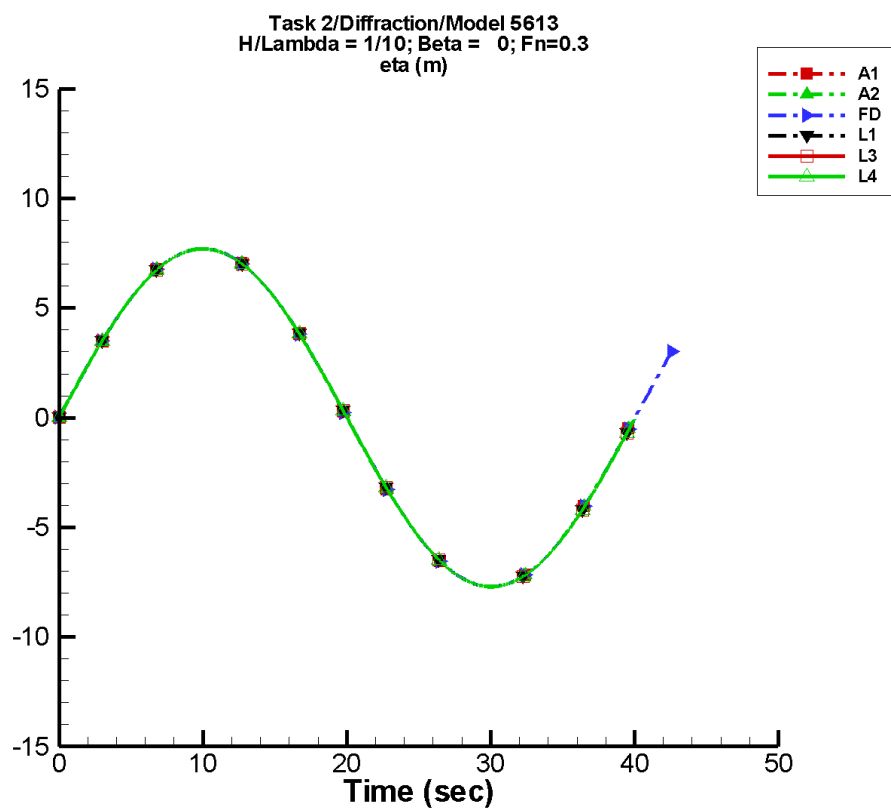| Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-5.38E+03	676.	-718.	89.8
FD	-2.42E-03	1.63E-02	-7.47E-04	1.12E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-3.69E-03	3.08E-03	-1.46E-03	8.14E-04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–340. Time history of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
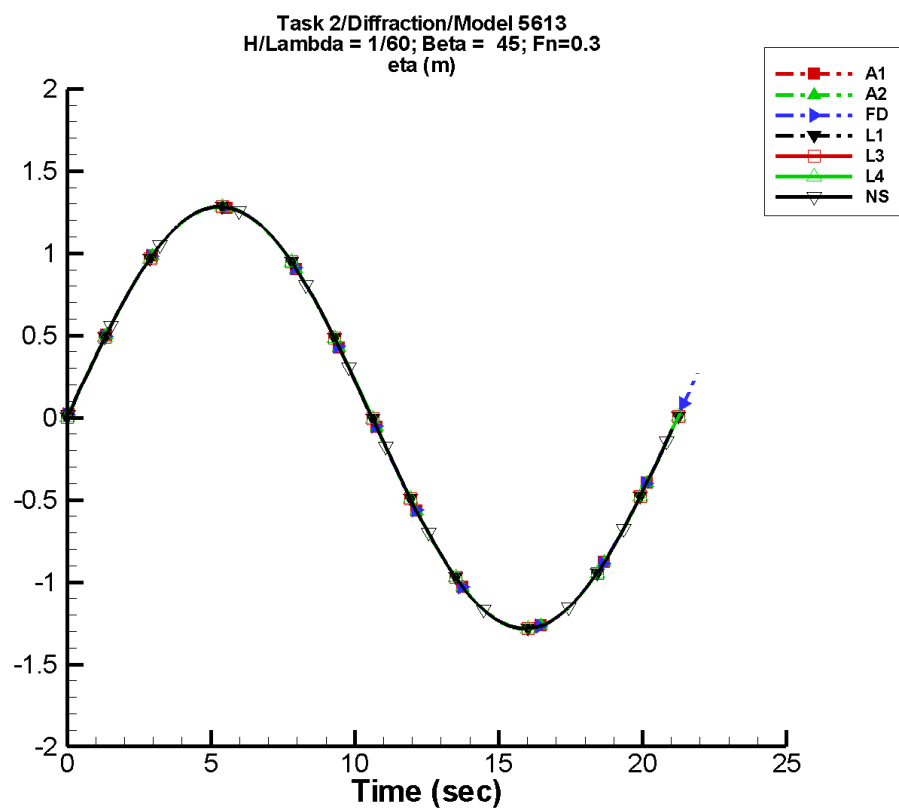
Table G–679. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	13.5	57.7	80	17.8	-173
FD	1.43E-03	4.86E-04	20	1.21E-03	74
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–680. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-2.62E+03	2.61E+03	-359.	368.
FD	-1.99E-02	1.62E-02	-3.32E-03	6.74E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 0; Fn=0.3
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–341. Time history of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–681. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} +$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
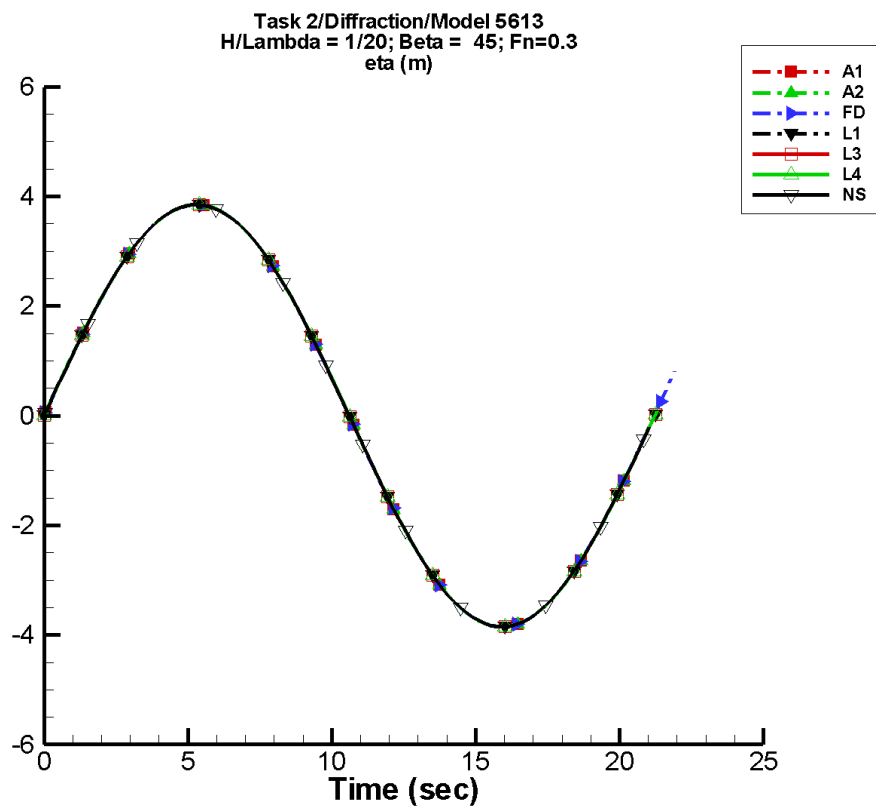
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-4.45E-06	1.21E-05	139	4.25E-06	78
FD	-5.71E-06	2.48E-06	105	8.72E-07	-149
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.02E-04	2.61E-04	18	1.46E-04	67

Table G–682. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
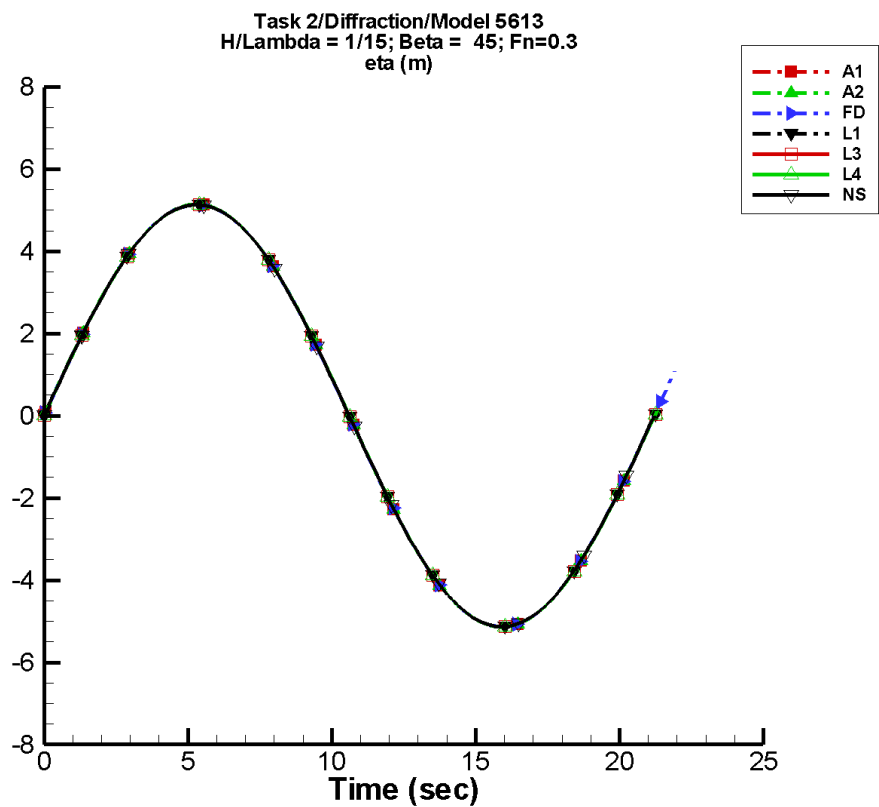
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-1.97E-04	1.41E-04	-1.50E-04	5.20E-05
FD	-3.19E-05	1.50E-05	-1.63E-05	1.36E-06
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.68E-03	1.28E-03	-7.49E-04	4.12E-04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.3
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–342. Time history of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–683. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
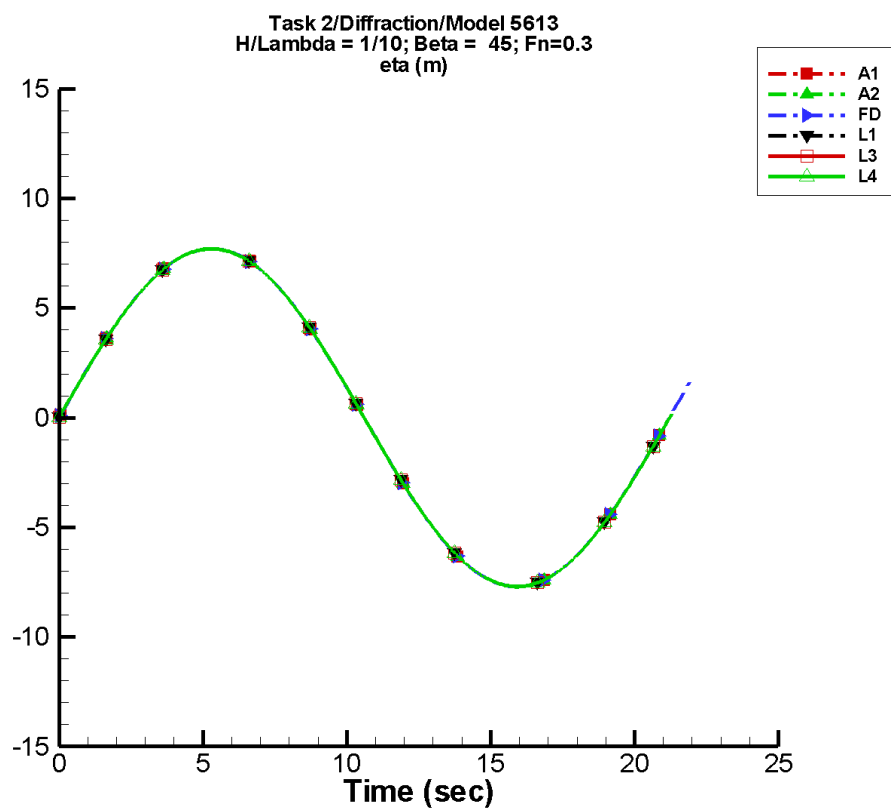
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	23.9	28.6	13	27.8	12
FD	-4.32E-07	7.90E-06	174	2.67E-05	179
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-3.28E-04	2.31E-04	-83	4.40E-04	-158

Table G–684. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-2.44E+03	2.84E+03	-61.1	741.
FD	-7.09E-05	7.75E-05	-4.02E-05	6.10E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-4.26E-03	2.65E-03	-1.54E-03	4.02E-04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta =   0; Fn=0.3
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–343. Time history of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
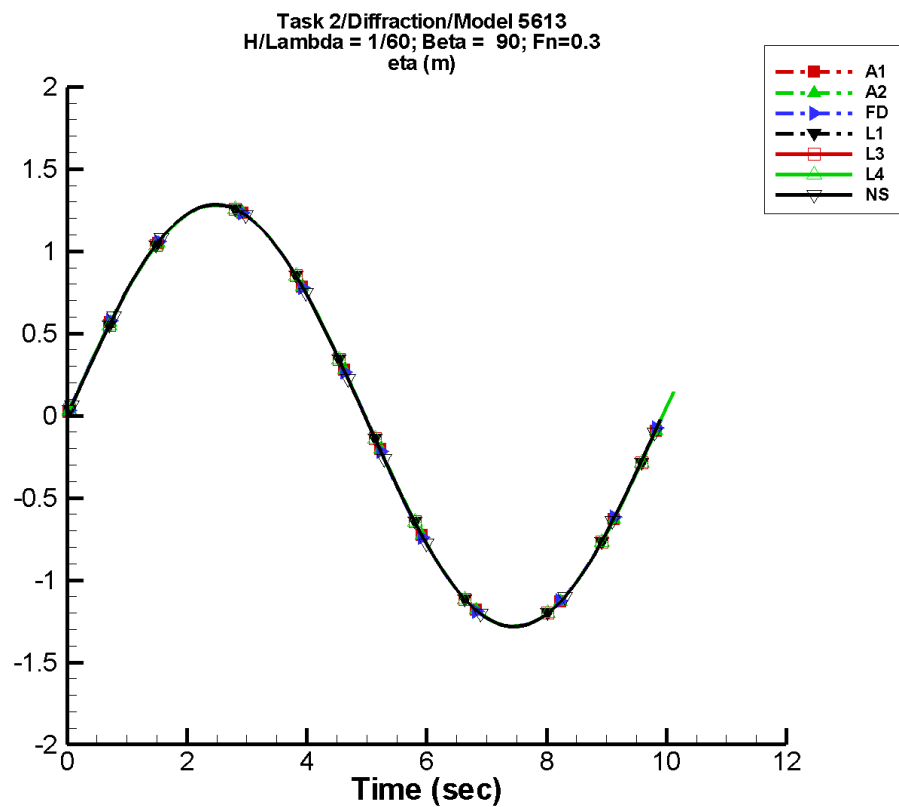
Table G–685. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	24.2	11.7	-73	29.6	69
FD	3.56E-06	1.10E-05	102	2.04E-05	163
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.27E-04	4.41E-04	98	5.19E-04	88

Table G–686. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
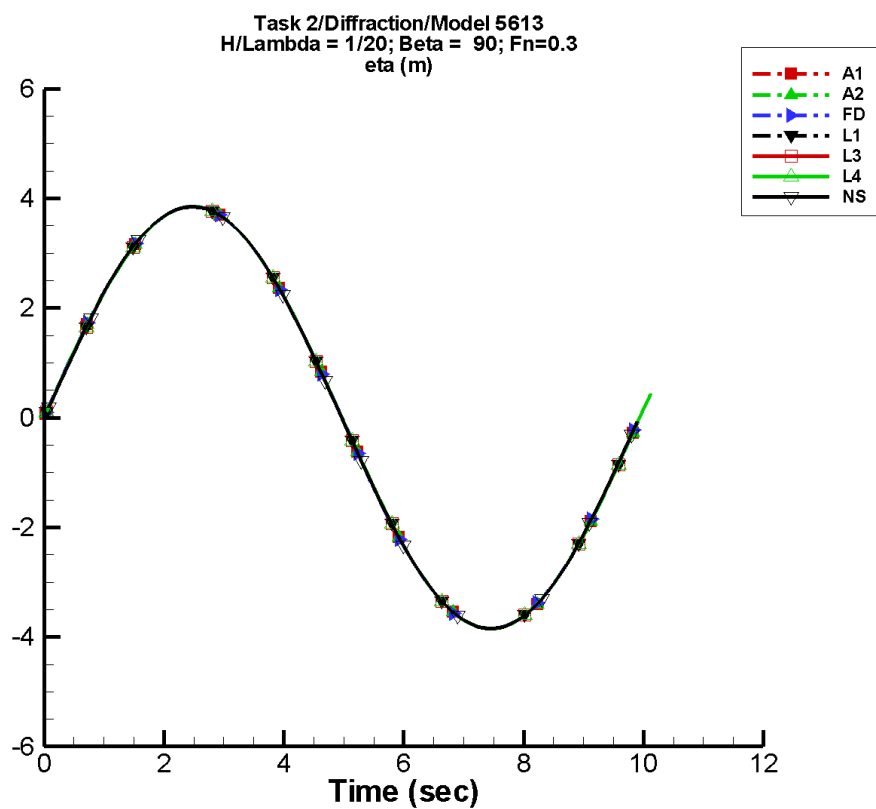
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-159.	2.84E+03	-32.4	419.
FD	-9.05E-05	8.14E-05	-3.34E-05	5.00E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-3.70E-03	2.94E-03	-1.31E-03	9.25E-04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–344. Time history of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–687. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
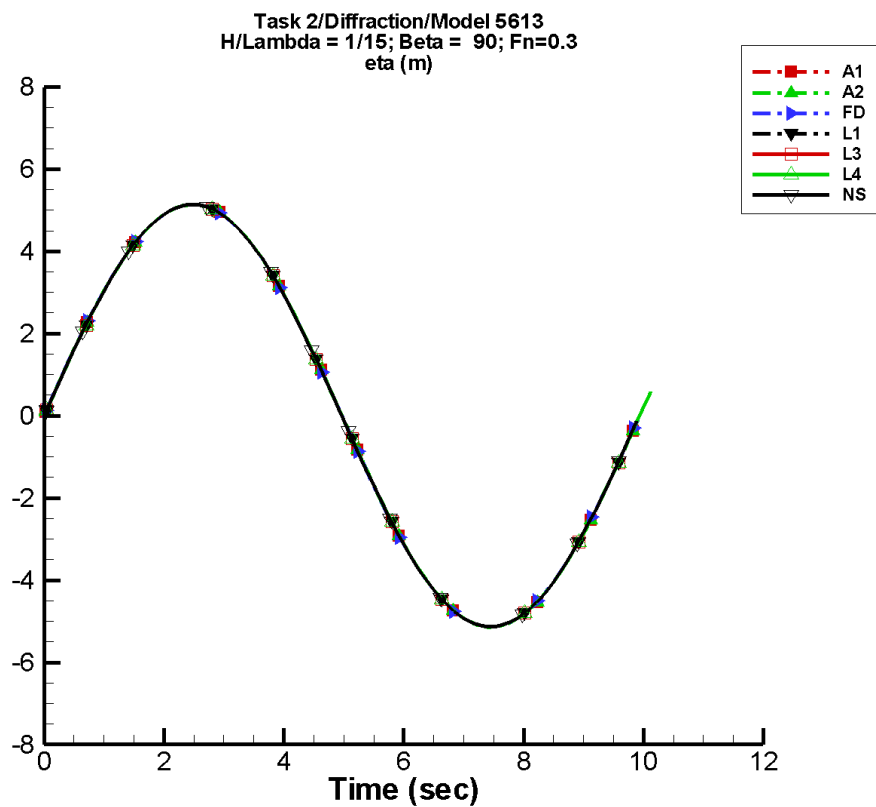
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-15.7	36.7	-39	40.4	23
FD	1.40E-06	2.17E-05	-158	2.51E-05	175
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–688. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-4.93E+03	2.84E+03	-661.	379.
FD	-1.39E-04	1.16E-04	-9.62E-05	7.08E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

G–929

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 45; Fn=0.3
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–345. Time history of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
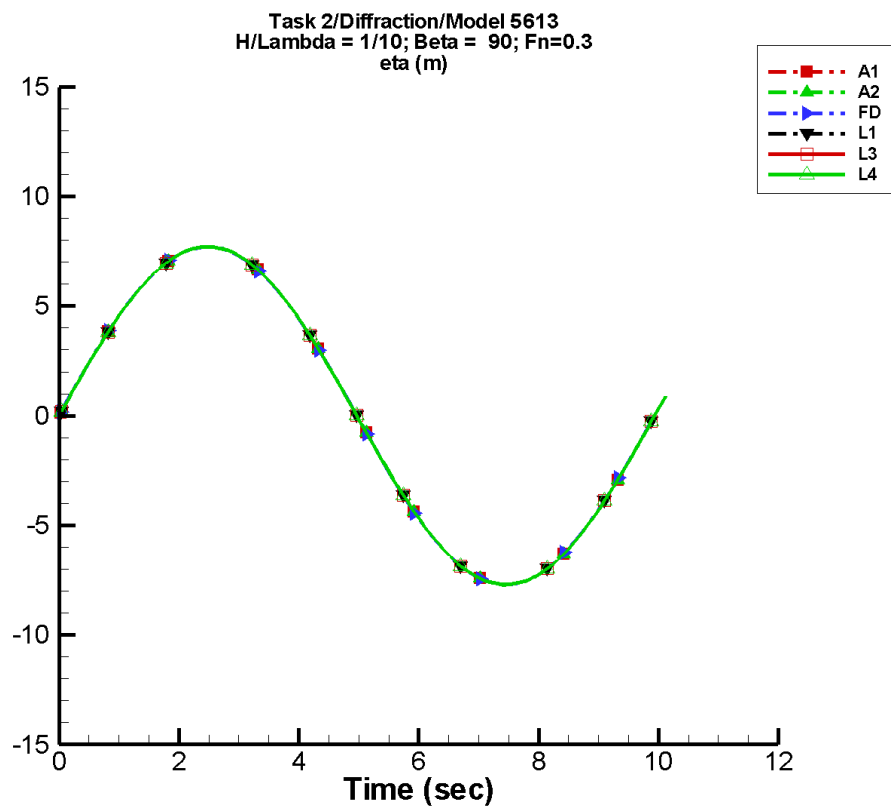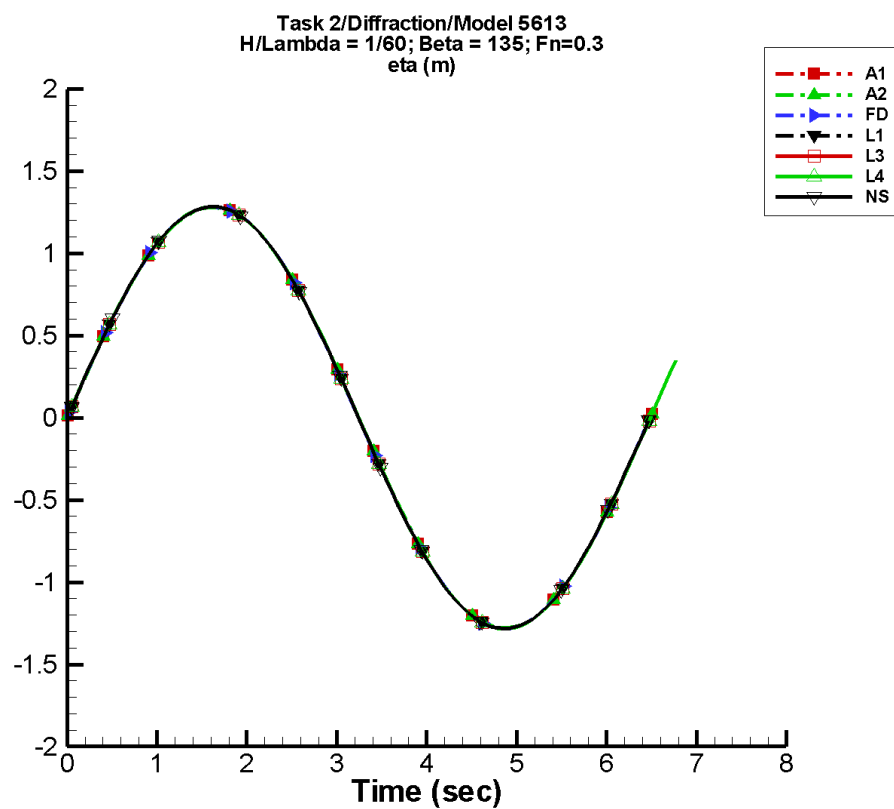
Table G–689. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-4.02	70.5	-78	95.1	86
FD	0.198	8.56	23	36.4	9
L1	—	—	—	—	—
L3	-0.167	8.67	24	35.8	2
L4	-0.167	8.67	24	35.8	2
NF	—	—	—	—	—
NS	-0.232	0.807	-12	27.7	-8

Table G–690. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-457.	268.	-441.	258.
FD	-52.5	50.4	-51.4	48.9
L1	—	—	—	—
L3	-45.4	44.7	-45.1	44.6
L4	-45.4	44.7	-45.1	44.6
NF	—	—	—	—
NS	-29.2	28.2	-28.1	27.1

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–346. Time history of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–691. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	38.1	236.	5	143.	-20
FD	0.846	227.	6	77.2	-13
L1	—	—	—	—	—
L3	0.948	227.	4	69.6	-26
L4	0.948	227.	4	69.6	-26
NF	—	—	—	—	—
NS	-8.66	31.4	-14	128.	-52

Table G–692. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
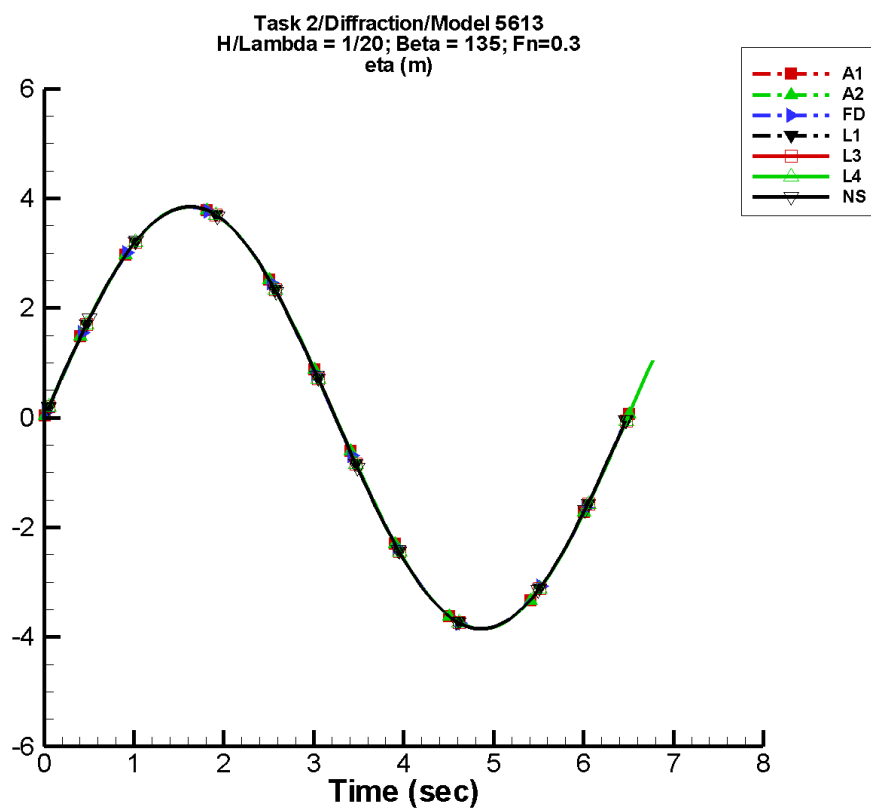
Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-590.	2.87E+03	-504.	1.26E+03
FD	-401.	311.	-387.	303.
L1	—	—	—	—
L3	-416.	303.	-407.	302.
L4	-416.	303.	-407.	302.
NF	—	—	—	—
NS	-174.	151.	-168.	144.

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 45; Fn=0.3
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–347. Time history of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

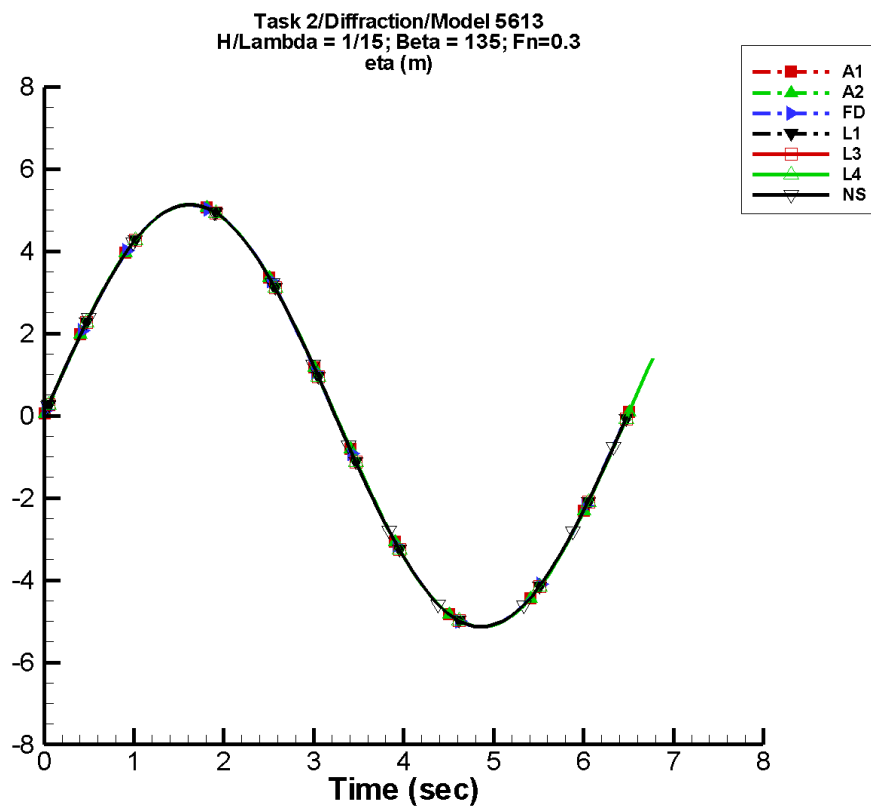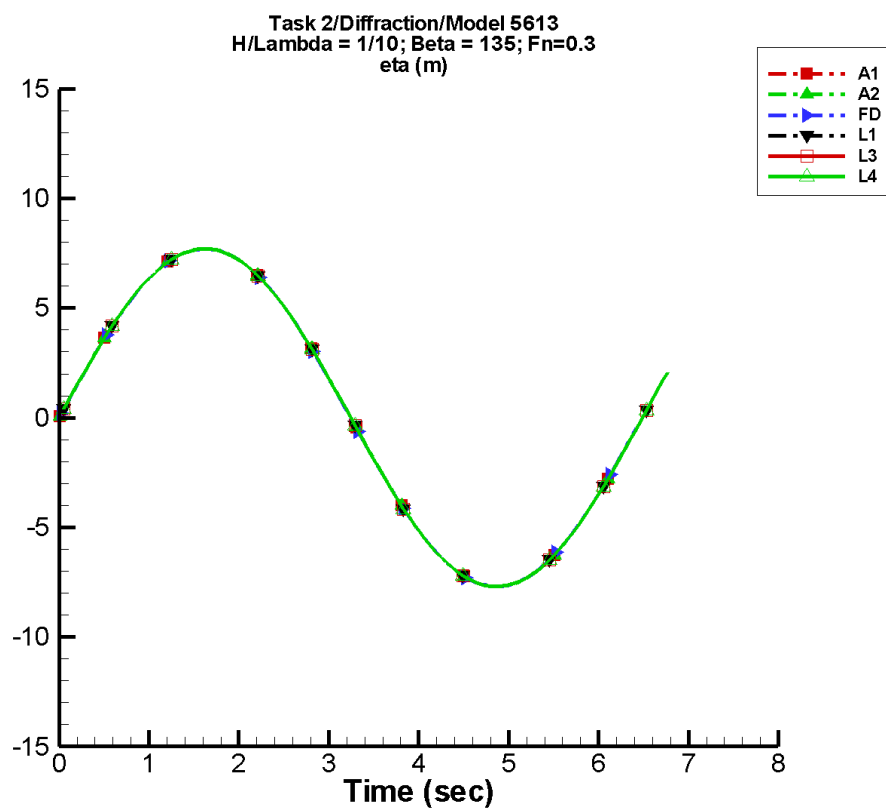Table G–693. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+ \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	46.1	500.	-6	193.	-29
FD	-2.37	531.	-10	21.7	132
L1	—	—	—	—	—
L3	3.73	535.	-13	40.6	178
L4	3.73	535.	-13	40.6	178
NF	—	—	—	—	—
NS	-21.0	111.	-13	166.	-70

Table G–694. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-1.32E+03	2.26E+03	-693.	821.
FD	-987.	651.	-908.	637.
L1	—	—	—	—
L3	-990.	653.	-962.	643.
L4	-990.	653.	-962.	643.
NF	—	—	—	—
NS	-332.	249.	-299.	241.

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 45; Fn=0.3
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–348. Time history of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–695. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
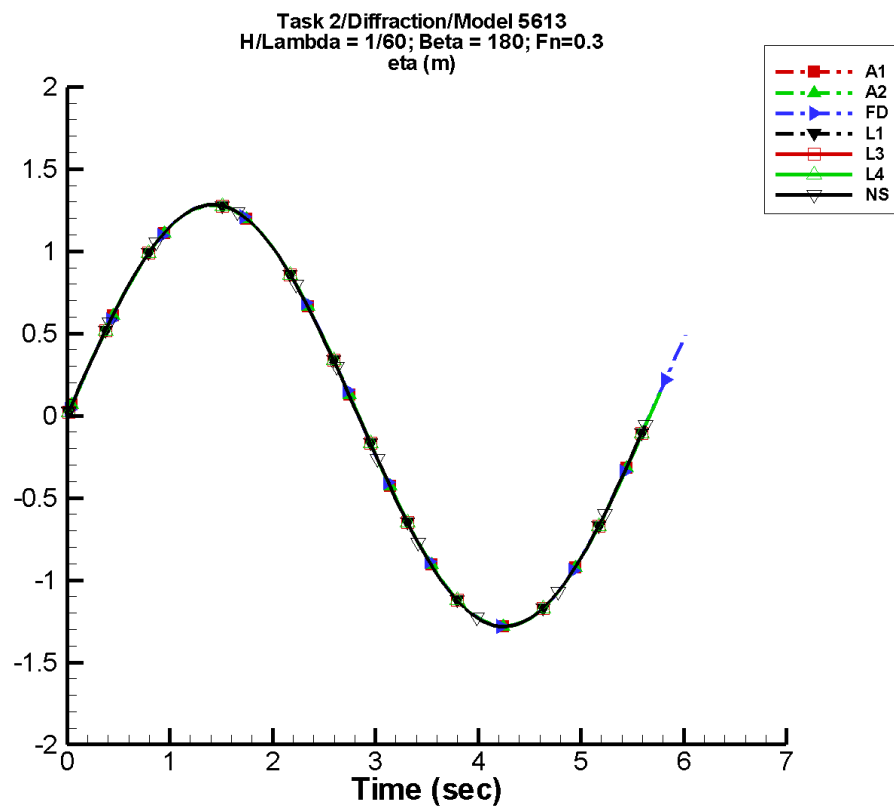
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	66.9	2.16E+03	-61	236.	-147
FD	-19.4	2.12E+03	-53	123.	23
L1	—	—	—	—	—
L3	6.14	2.14E+03	-57	32.6	-33
L4	6.14	2.14E+03	-57	32.6	-33
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–696. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-6.41E+03	6.63E+03	-2.35E+03	2.54E+03
FD	-2.36E+03	2.58E+03	-2.32E+03	2.51E+03
L1	—	—	—	—
L3	-2.39E+03	2.53E+03	-2.31E+03	2.51E+03
L4	-2.39E+03	2.53E+03	-2.31E+03	2.51E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–349. Time history of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–697. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-2.90	78.1	-141	817.	158
FD	0.415	17.6	-101	680.	165
L1	—	—	—	—	—
L3	-0.416	18.2	-96	677.	172
L4	-0.416	18.2	-96	677.	172
NF	—	—	—	—	—
NS	-0.587	8.02	-93	560.	172

Table G–698. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-1.33E+03	1.33E+03	-1.26E+03	1.26E+03
FD	-696.	697.	-669.	668.
L1	—	—	—	—
L3	-697.	697.	-688.	687.
L4	-697.	697.	-688.	687.
NF	—	—	—	—
NS	-567.	567.	-546.	544.

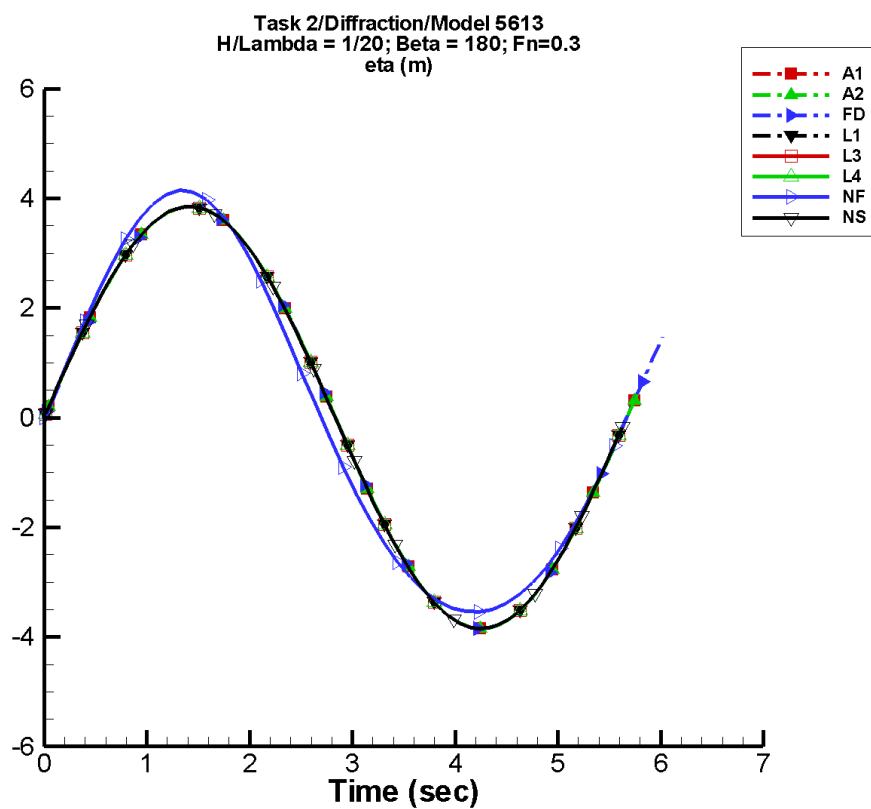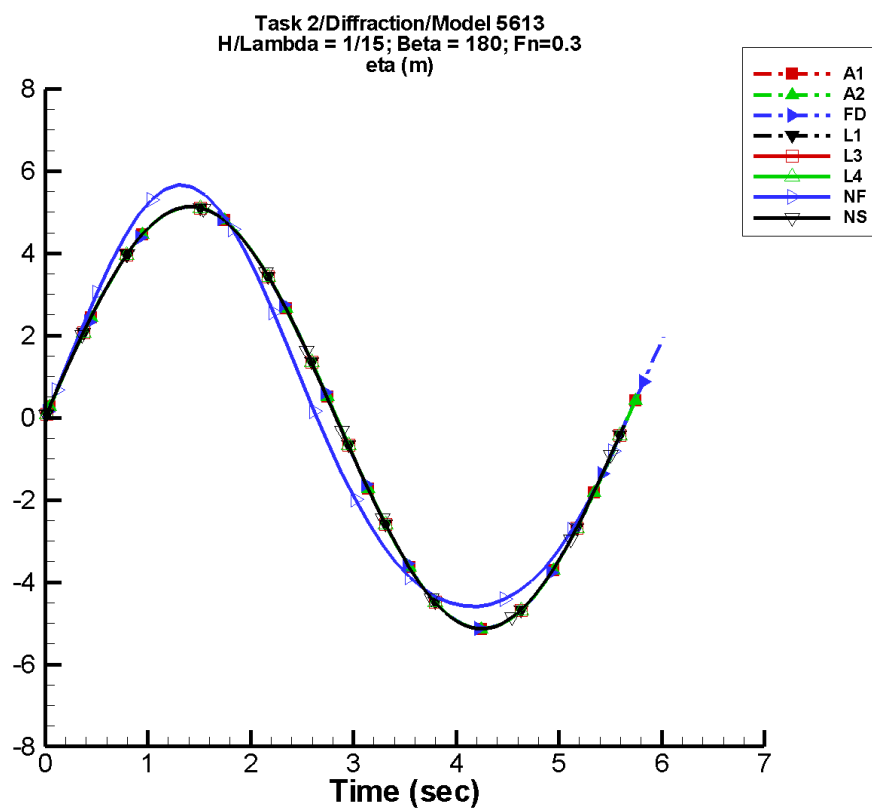Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–350. Time history of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
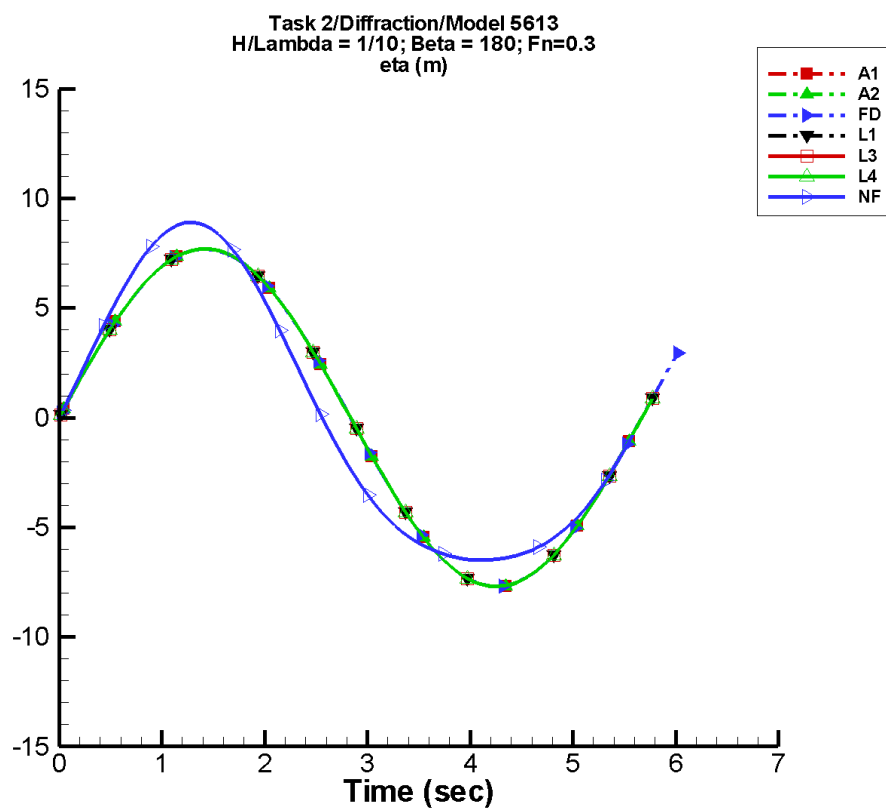
Table G–699. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	32.3	705.	-103	5.23E+03	165
FD	14.4	534.	-102	5.42E+03	165
L1	—	—	—	—	—
L3	-4.45	509.	-96	5.42E+03	172
L4	-4.45	509.	-96	5.42E+03	172
NF	—	—	—	—	—
NS	-38.9	311.	-92	4.58E+03	172

Table G–700. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-6.33E+03	6.30E+03	-5.69E+03	5.66E+03
FD	-6.05E+03	6.04E+03	-5.81E+03	5.81E+03
L1	—	—	—	—
L3	-6.01E+03	6.01E+03	-5.93E+03	5.93E+03
L4	-6.01E+03	6.01E+03	-5.93E+03	5.93E+03
NF	—	—	—	—
NS	-4.96E+03	4.94E+03	-4.77E+03	4.74E+03

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–351. Time history of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
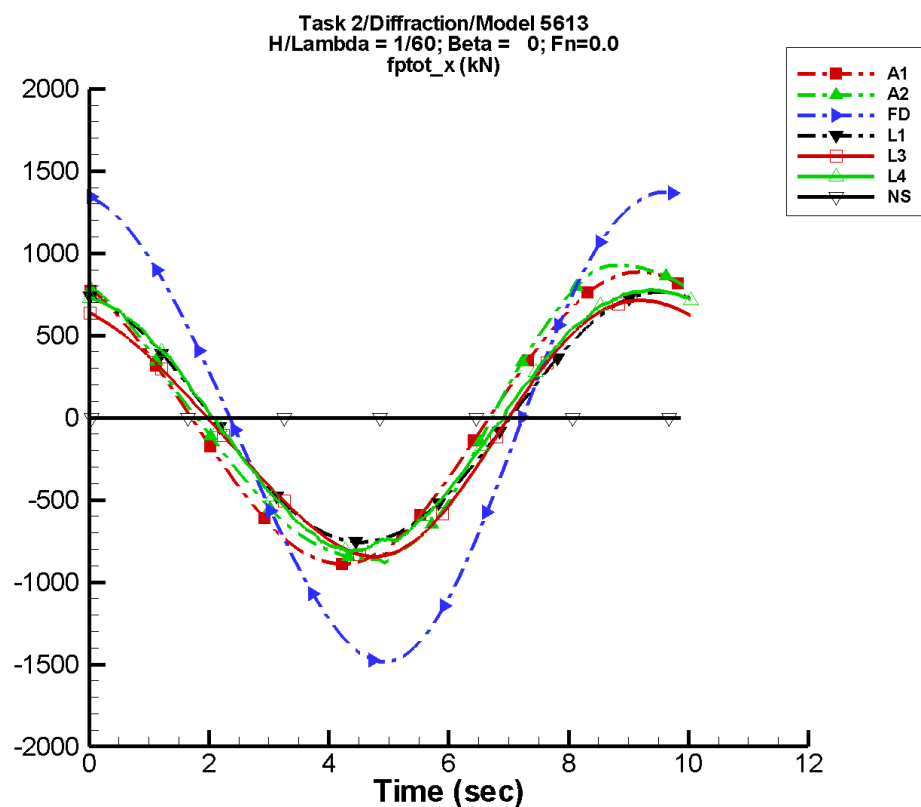
Table G–701. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} +$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	19.4	1.15E+03	-102	8.62E+03	164
FD	42.3	1.38E+03	-103	8.88E+03	166
L1	—	—	—	—	—
L3	-10.2	1.34E+03	-96	8.88E+03	172
L4	-10.2	1.34E+03	-96	8.88E+03	172
NF	—	—	—	—	—
NS	-88.4	707.	-90	7.26E+03	173

Table G–702. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-9.64E+03	9.86E+03	-9.31E+03	9.29E+03
FD	-1.05E+04	1.05E+04	-1.01E+04	1.01E+04
L1	—	—	—	—
L3	-1.05E+04	1.05E+04	-1.03E+04	1.03E+04
L4	-1.05E+04	1.05E+04	-1.03E+04	1.03E+04
NF	—	—	—	—
NS	-8.16E+03	8.12E+03	-7.96E+03	7.93E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.3
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–352. Time history of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
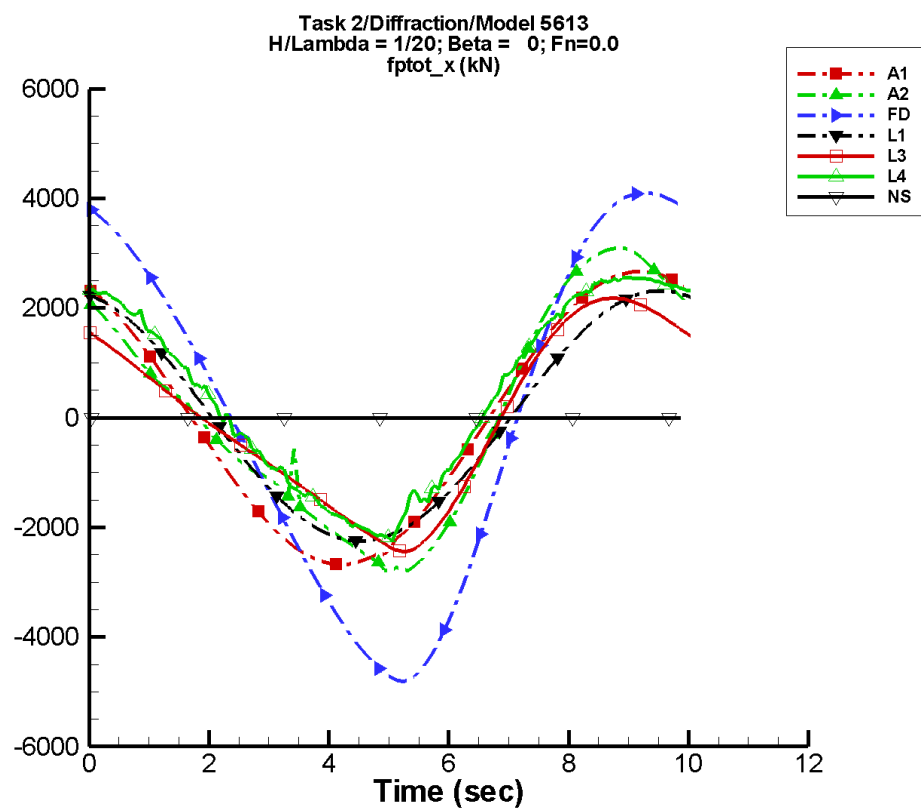
Table G–703. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} + \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
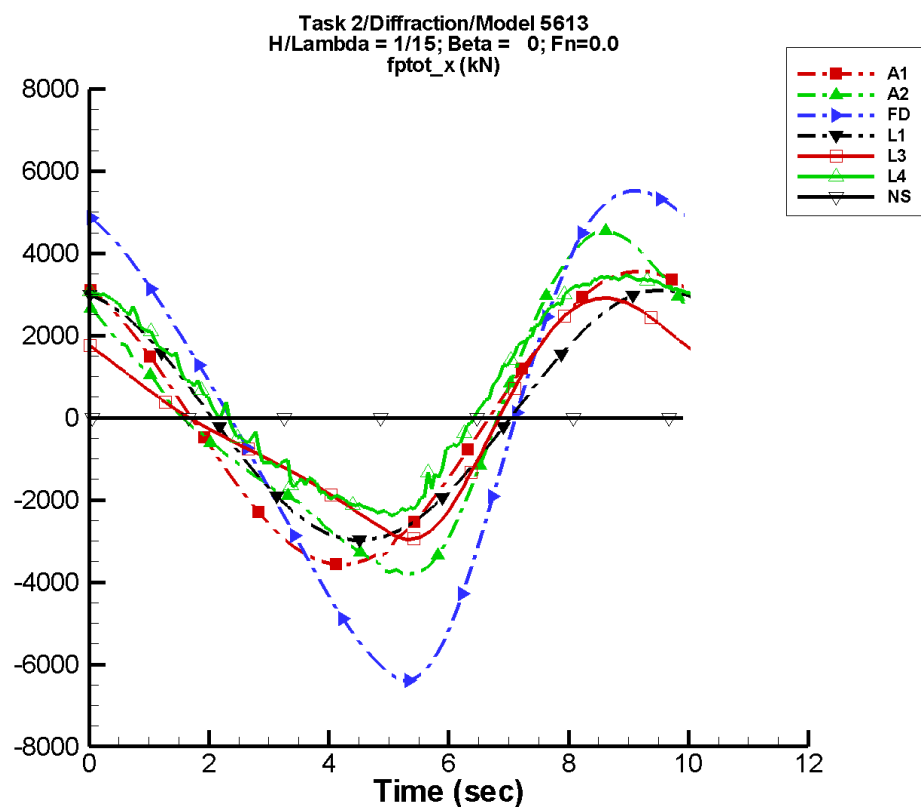
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-3.63	5.99E+03	-102	1.47E+04	162
FD	182.	5.91E+03	-104	1.49E+04	168
L1	—	—	—	—	—
L3	-76.9	5.84E+03	-96	1.48E+04	171
L4	-76.9	5.84E+03	-96	1.48E+04	171
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–704. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-2.27E+04	2.24E+04	-2.16E+04	2.15E+04
FD	-2.27E+04	2.27E+04	-2.17E+04	2.17E+04
L1	—	—	—	—
L3	-2.26E+04	2.26E+04	-2.22E+04	2.22E+04
L4	-2.26E+04	2.26E+04	-2.22E+04	2.22E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–353. Time history of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
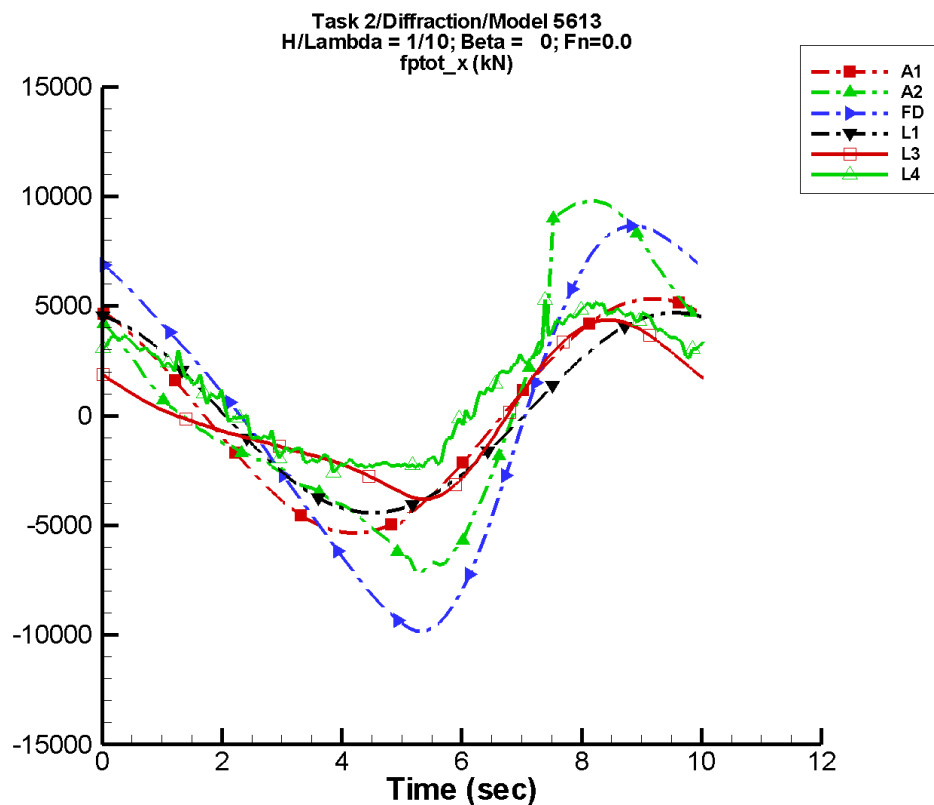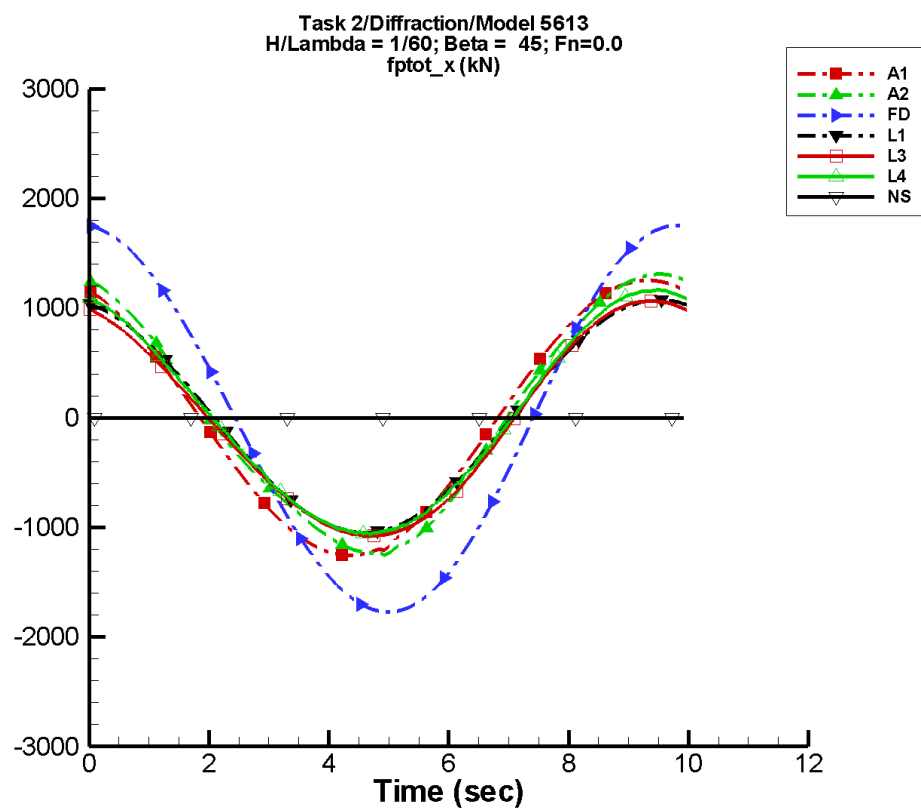
Table G–705. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-6.09	93.8	-132	43.2	-112
FD	-0.449	9.76	168	36.4	7
L1	—	—	—	—	—
L3	0.217	8.99	162	34.1	-4
L4	0.217	8.99	162	34.1	-4
NF	—	—	—	—	—
NS	-0.517	2.63	-104	26.3	41

Table G–706. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-268.	456.	-181.	314.
FD	-49.5	52.1	-39.2	44.6
L1	—	—	—	—
L3	-44.6	45.4	-43.2	43.8
L4	-44.6	45.4	-43.2	43.8
NF	—	—	—	—
NS	-28.3	29.6	-27.1	28.4

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–354. Time history of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–707. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	7.65	165.	-171	119.	-18
FD	-8.33	245.	-173	64.2	44
L1	—	—	—	—	—
L3	-4.55	229.	-180	47.8	26
L4	-4.55	229.	-180	47.8	26
NF	—	—	—	—	—
NS	-33.4	142.	-138	147.	101

Table G–708. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

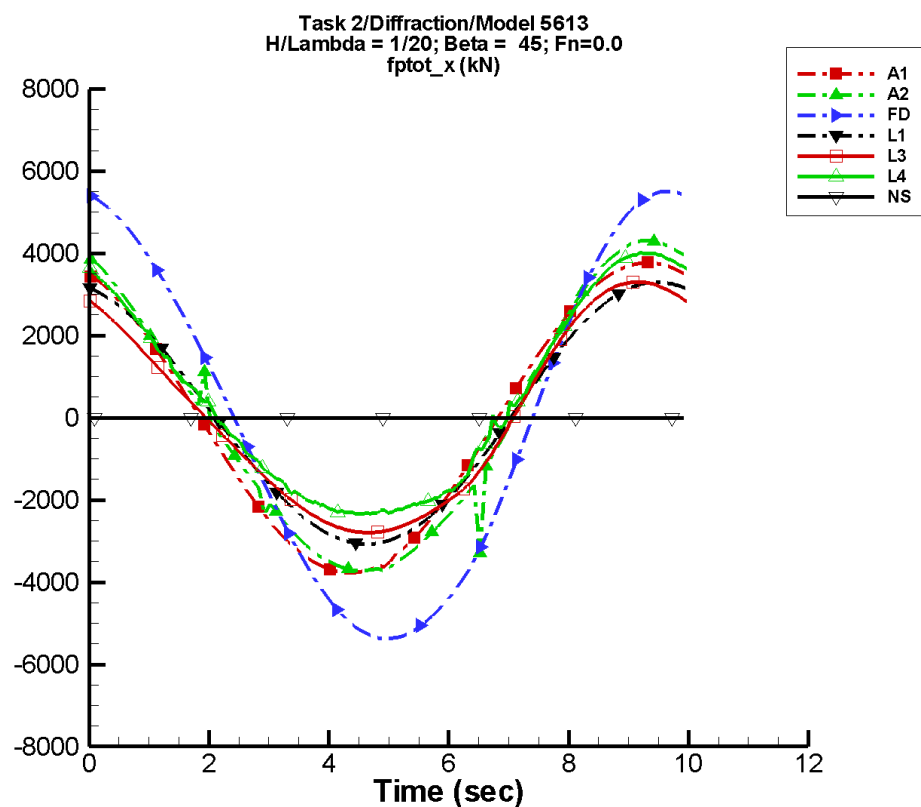| Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-379.	1.75E+03	-310.	353.
FD	-308.	401.	-276.	327.
L1	—	—	—	—
L3	-303.	415.	-299.	363.
L4	-303.	415.	-299.	363.
NF	—	—	—	—
NS	-287.	326.	-245.	265.

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.3
fhst_y (kN)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–355. Time history of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
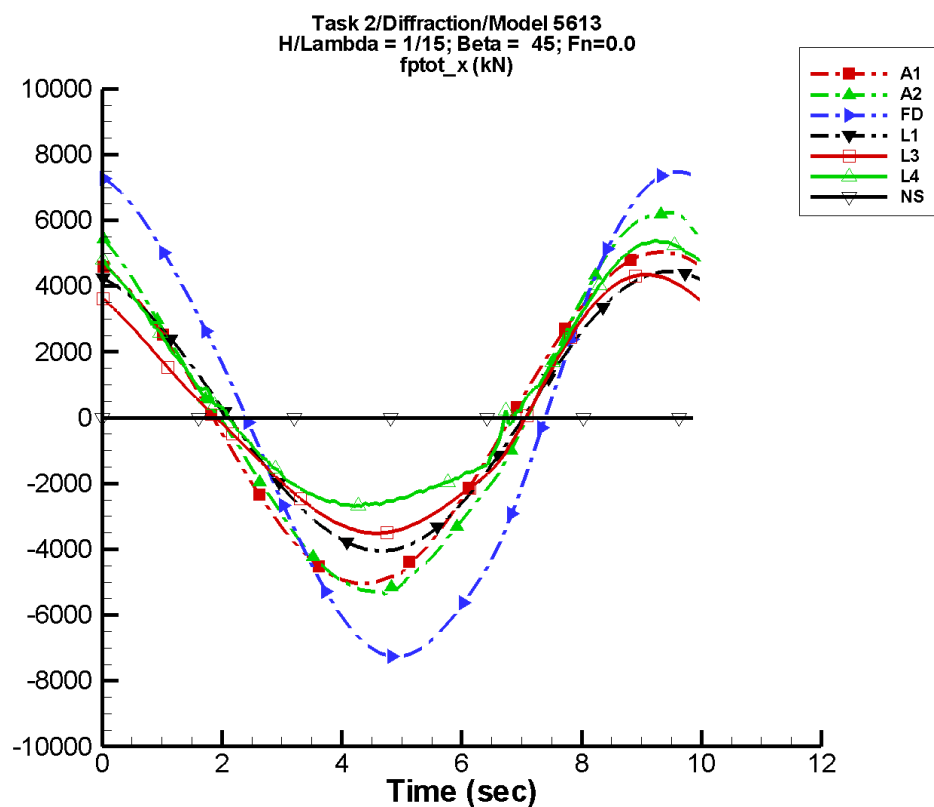
Table G–709. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} +$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-16.3	441.	-177	195.	-9
FD	-13.0	552.	-158	64.2	-157
L1	—	—	—	—	—
L3	-11.6	537.	-166	70.4	-152
L4	-11.6	537.	-166	70.4	-152
NF	—	—	—	—	—
NS	-64.3	345.	-106	453.	147

Table G–710. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-889.	719.	-727.	540.
FD	-644.	981.	-592.	606.
L1	—	—	—	—
L3	-656.	967.	-628.	789.
L4	-656.	967.	-628.	789.
NF	—	—	—	—
NS	-779.	795.	-706.	767.

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–356. Time history of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
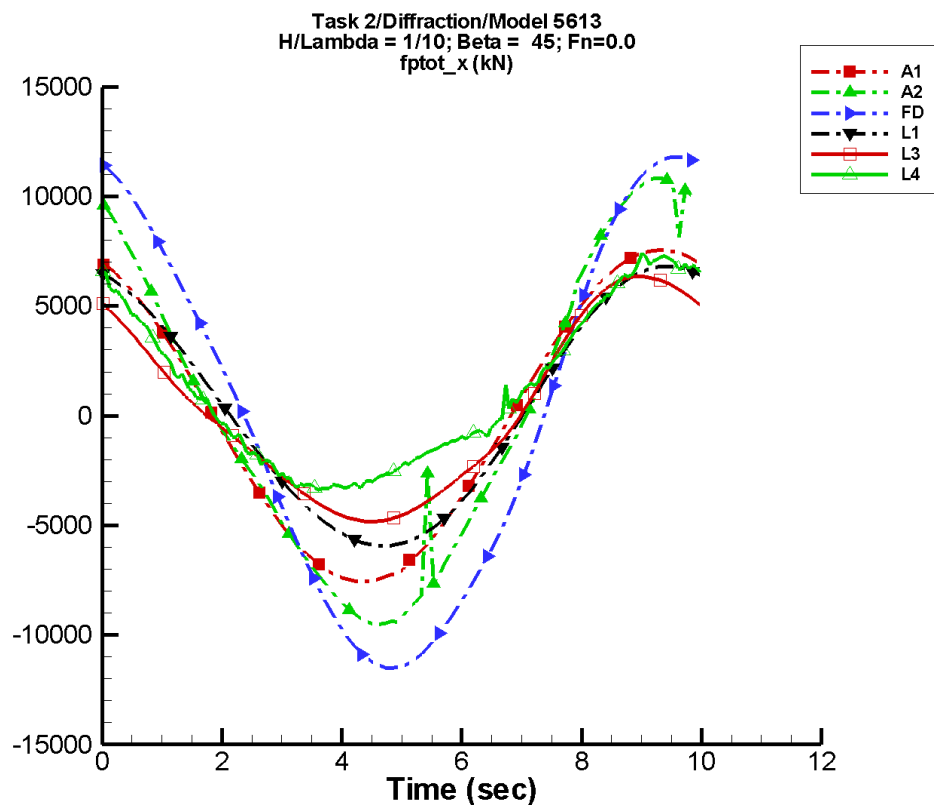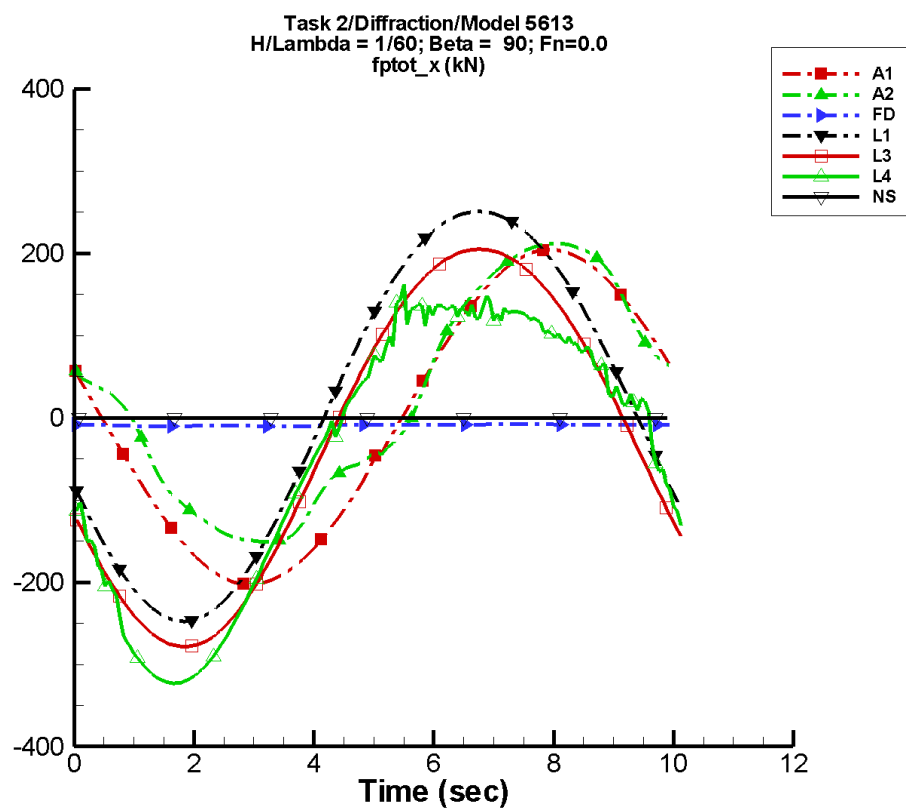
Table G–711. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-68.6	2.04E+03	-127	181.	-175
FD	-10.9	2.15E+03	-119	108.	-62
L1	—	—	—	—	—
L3	-27.8	2.12E+03	-125	117.	-66
L4	-27.8	2.12E+03	-125	117.	-66
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–712. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-2.59E+03	2.34E+03	-2.38E+03	2.02E+03
FD	-2.58E+03	2.36E+03	-2.40E+03	2.20E+03
L1	—	—	—	—
L3	-2.53E+03	2.34E+03	-2.46E+03	2.23E+03
L4	-2.53E+03	2.34E+03	-2.46E+03	2.23E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–357. Time history of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–713. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-8.16E-06	1.60E-05	-176	1.36E-05	63
FD	1.90E-04	4.48E-04	55	2.67E-04	-173
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-7.16E-05	2.67E-04	-66	8.67E-05	125

Table G–714. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

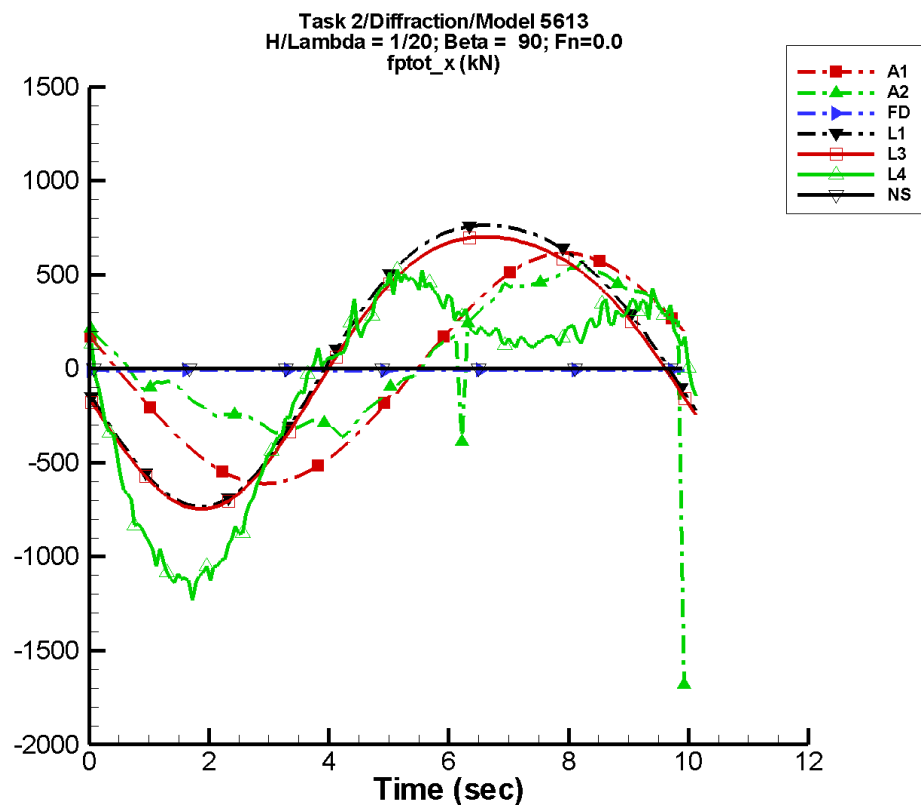| Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-1.72E-04	1.10E-04	-5.66E-05	1.99E-05
FD	-1.27E-03	1.92E-03	-5.40E-04	6.75E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-2.00E-03	1.57E-03	-7.39E-04	5.15E-04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–358. Time history of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
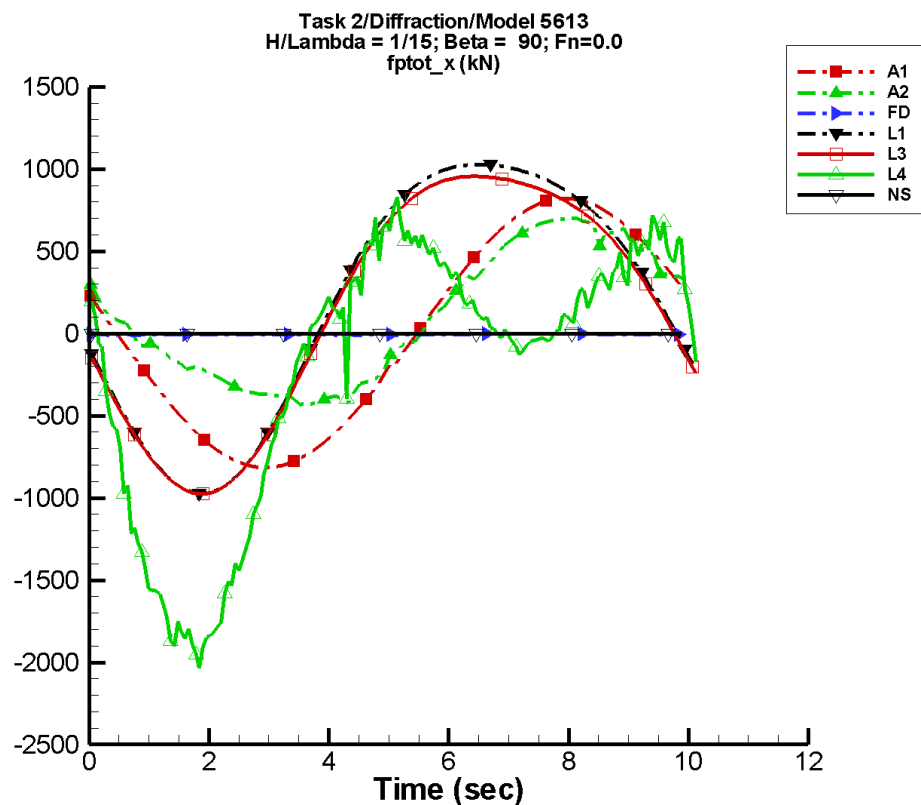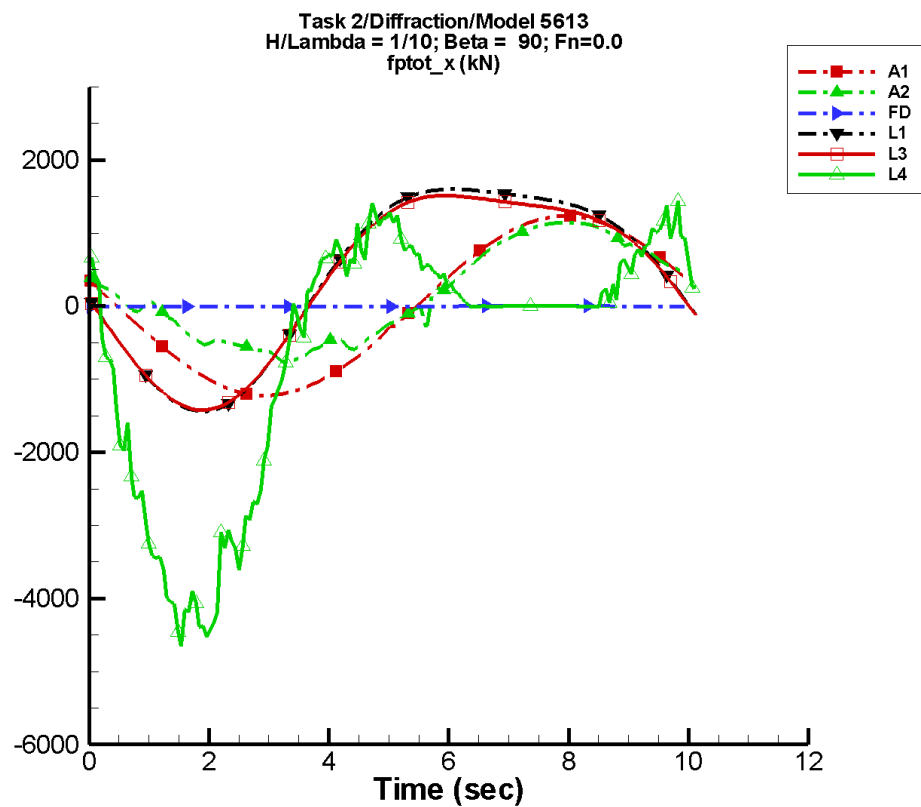
Table G–715. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	19.6	43.9	14	55.9	-60
FD	1.47E-04	3.86E-04	-142	1.18E-03	40
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-4.48E-04	1.99E-04	12	3.48E-04	-3

Table G–716. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-3.46E-04	2.51E+03	-28.7	335.
FD	-1.23E-02	1.53E-02	-2.46E-03	3.48E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-3.08E-03	2.57E-03	-1.51E-03	3.19E-04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–359. Time history of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
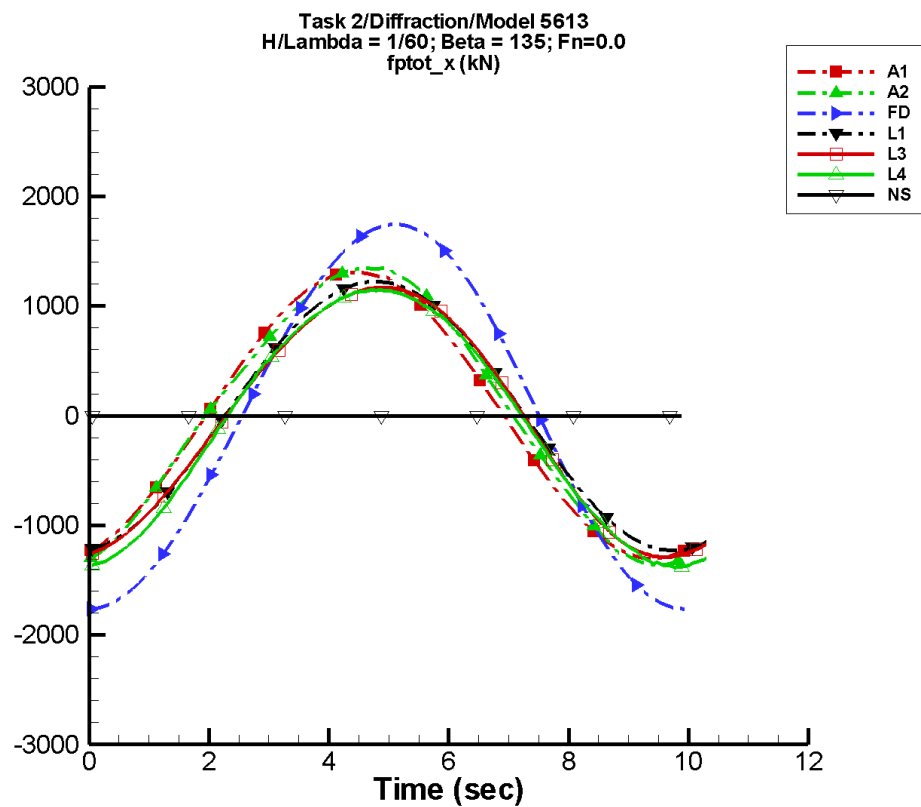
Table G–717. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	10.7	19.4	106	19.9	134
FD	3.80E-04	1.09E-03	-57	1.14E-03	146
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.35E-05	5.48E-04	-87	6.24E-04	82

Table G–718. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	—	—	—	—
A2	-1.40E-03	564.	-6.41	75.2
FD	-1.75E-02	2.22E-02	-1.09E-03	3.20E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-3.87E-03	3.97E-03	-1.14E-03	1.49E-03

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–360. Time history of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–719. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
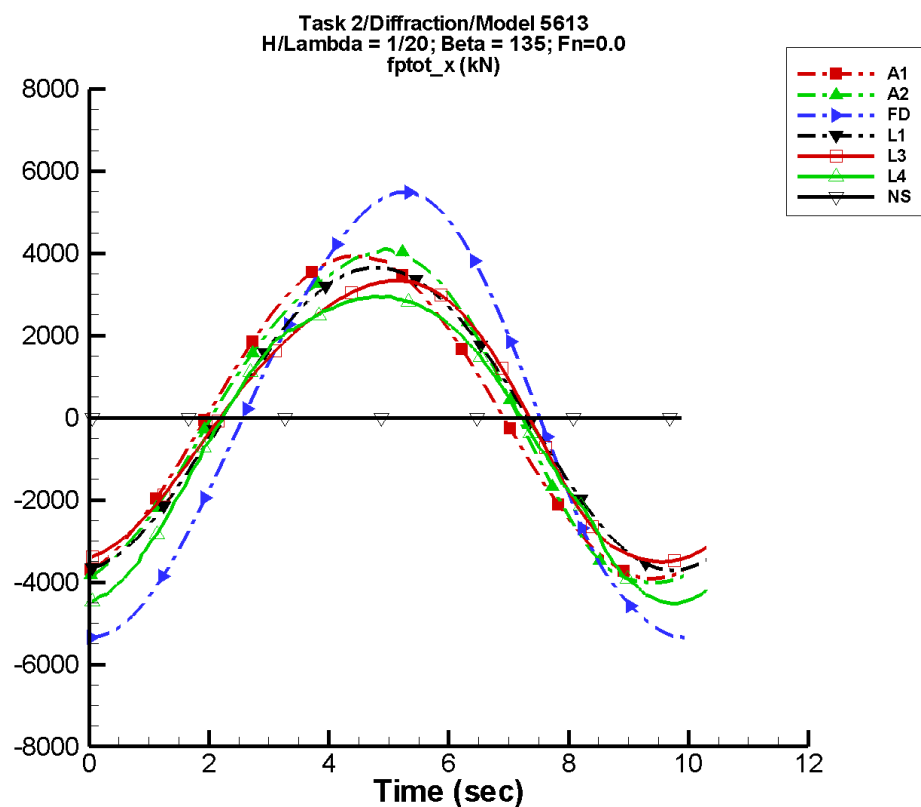
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	—	—	—	—	—
A2	4.62	9.89	-125	8.60	9
FD	-1.48E-03	3.42E-03	-104	6.99E-03	-82
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–720. Minimum and maximum of of F_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	—	—	—	—
A2	-9.57	274.	-4.21	36.5
FD	-3.78E-02	4.43E-02	-1.87E-02	9.69E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–361. Time history of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
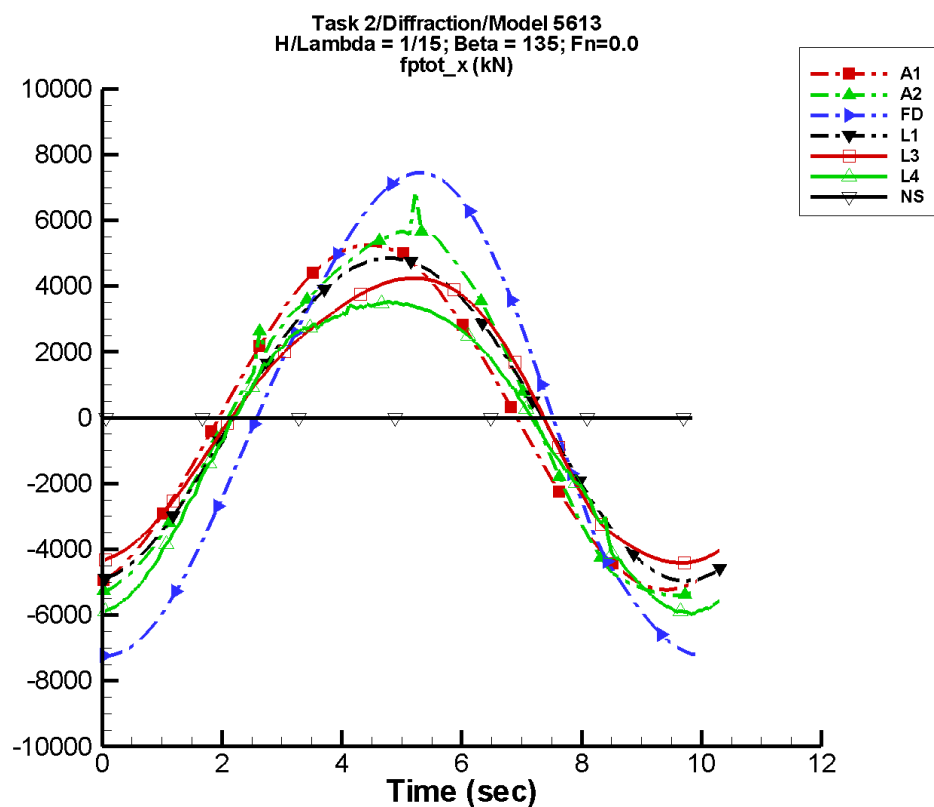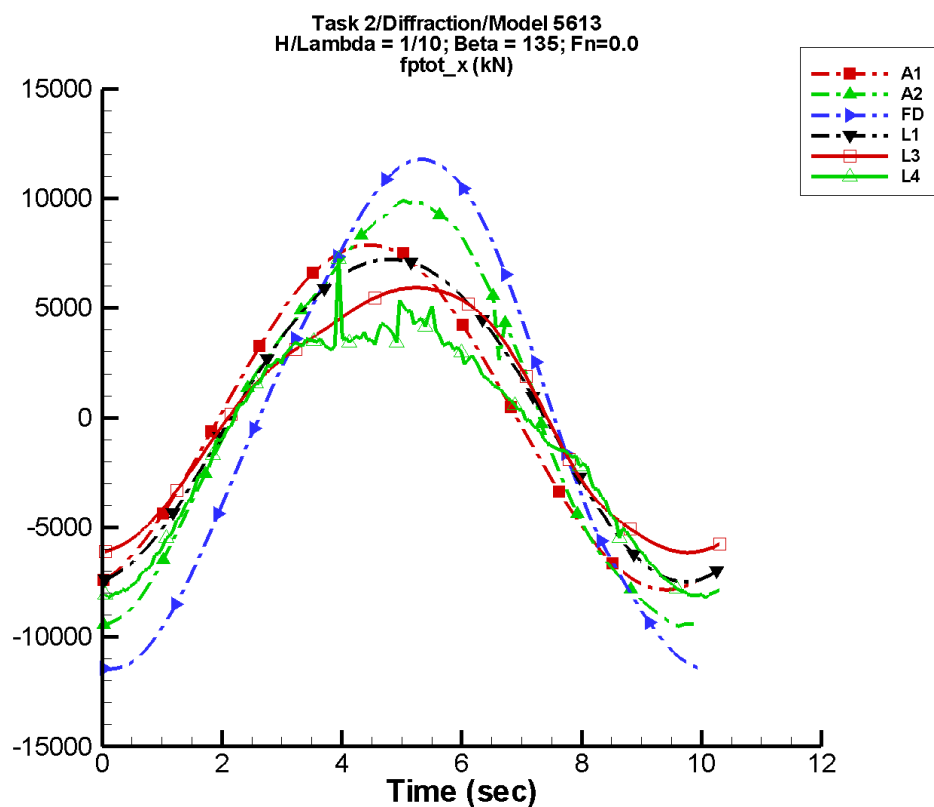
Table G–721. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	8.50E+04	1.53E+03	175	569.	10
FD	8.49E+04	518.	149	287.	14
L1	8.56E+04	2.52E-02	89	1.58E-02	143
L3	8.51E+04	531.	152	274.	22
L4	8.51E+04	531.	152	274.	22
NF	—	—	—	—	—
NS	8.47E+04	36.5	116	76.7	-41

Table G–722. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	8.32E+04	8.68E+04	8.32E+04	8.68E+04
FD	8.40E+04	8.52E+04	8.40E+04	8.52E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	8.43E+04	8.55E+04	8.43E+04	8.55E+04
L4	8.43E+04	8.55E+04	8.43E+04	8.55E+04
NF	—	—	—	—
NS	8.45E+04	8.48E+04	8.45E+04	8.48E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–362. Time history of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
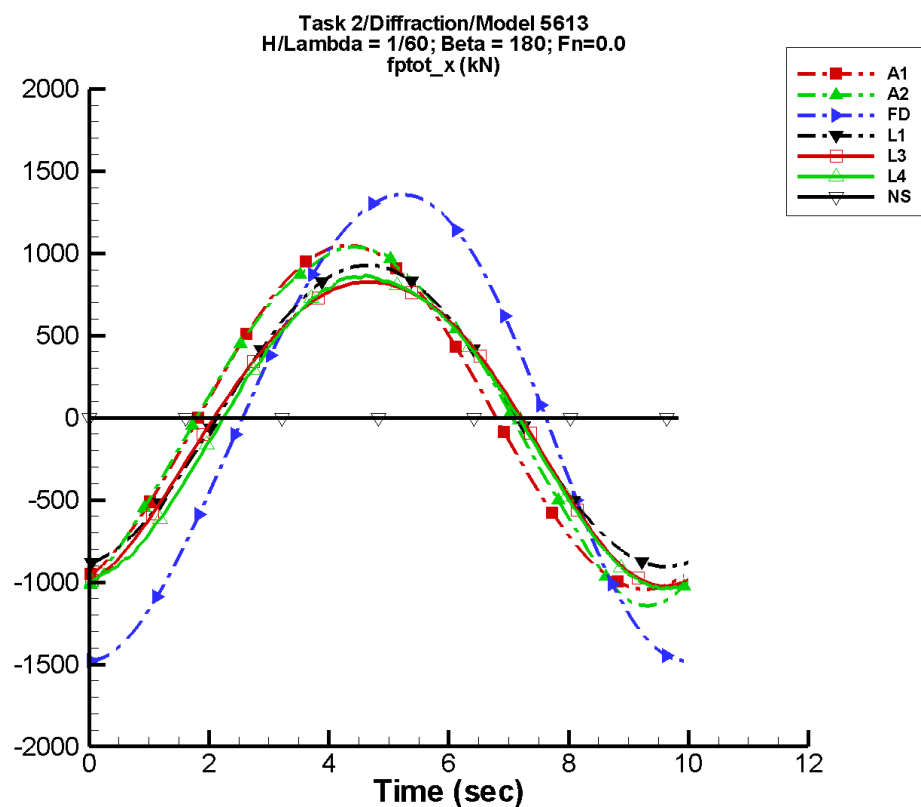
Table G–723. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	8.13E+04	4.19E+03	115	2.28E+03	-73
FD	8.15E+04	2.89E+03	108	2.06E+03	-68
L1	8.56E+04	2.52E-02	89	1.58E-02	143
L3	8.19E+04	2.96E+03	113	2.05E+03	-61
L4	8.19E+04	2.96E+03	113	2.05E+03	-61
NF	—	—	—	—	—
NS	8.14E+04	2.43E+03	99	1.97E+03	-62

Table G–724. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	7.28E+04	8.48E+04	7.34E+04	8.47E+04
FD	7.47E+04	8.35E+04	7.51E+04	8.35E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	7.49E+04	8.40E+04	7.51E+04	8.40E+04
L4	7.49E+04	8.40E+04	7.51E+04	8.40E+04
NF	—	—	—	—
NS	7.51E+04	8.39E+04	7.54E+04	8.37E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–363. Time history of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

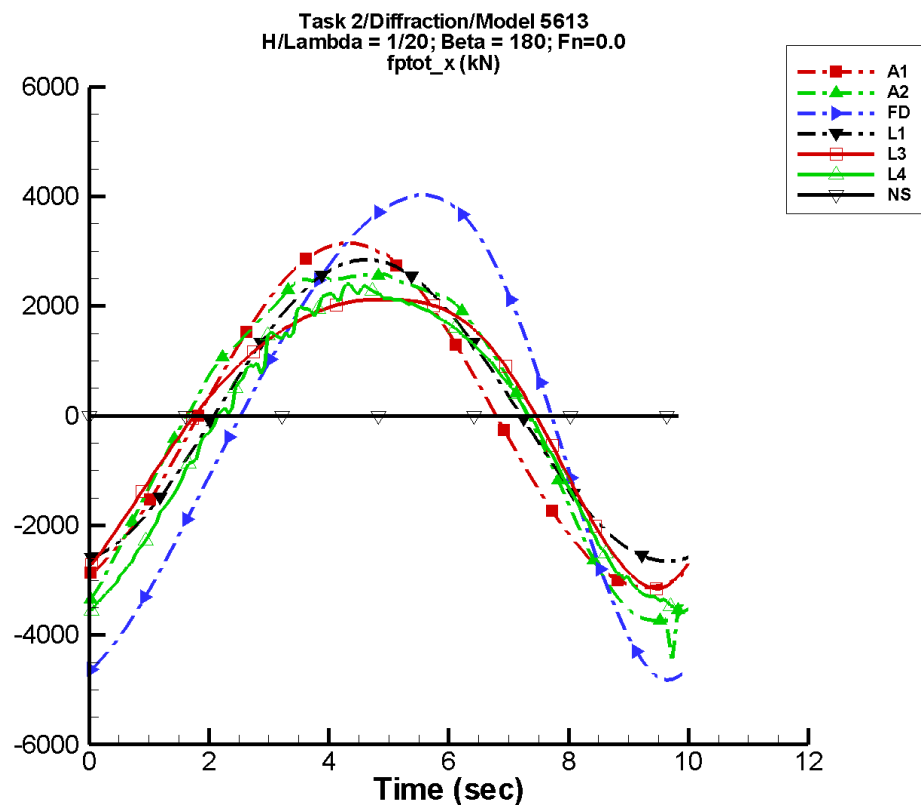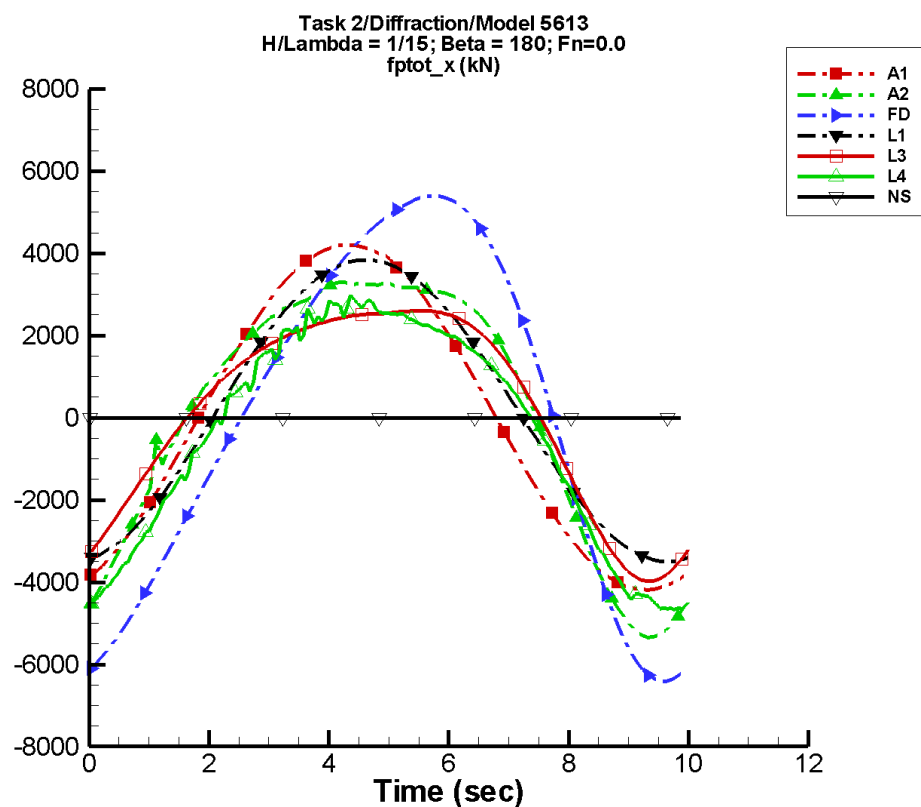Table G–725. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period $= 9.93$ sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	7.62E+04	5.80E+03	55	3.73E+03	-115
FD	7.62E+04	5.06E+03	49	3.49E+03	-112
L1	8.56E+04	2.52E-02	89	1.58E-02	143
L3	7.66E+04	5.11E+03	53	3.50E+03	-105
L4	7.66E+04	5.11E+03	53	3.50E+03	-105
NF	—	—	—	—	—
NS	7.46E+04	5.61E+03	29	3.35E+03	-106

Table G–726. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period $= 9.93$ sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	6.42E+04	8.28E+04	6.50E+04	8.26E+04
FD	6.55E+04	8.24E+04	6.62E+04	8.22E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	6.58E+04	8.27E+04	6.59E+04	8.26E+04
L4	6.58E+04	8.27E+04	6.59E+04	8.26E+04
NF	—	—	—	—
NS	6.33E+04	8.31E+04	6.44E+04	8.30E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta =   0; Fn=0.0
fhst_z (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–364. Time history of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

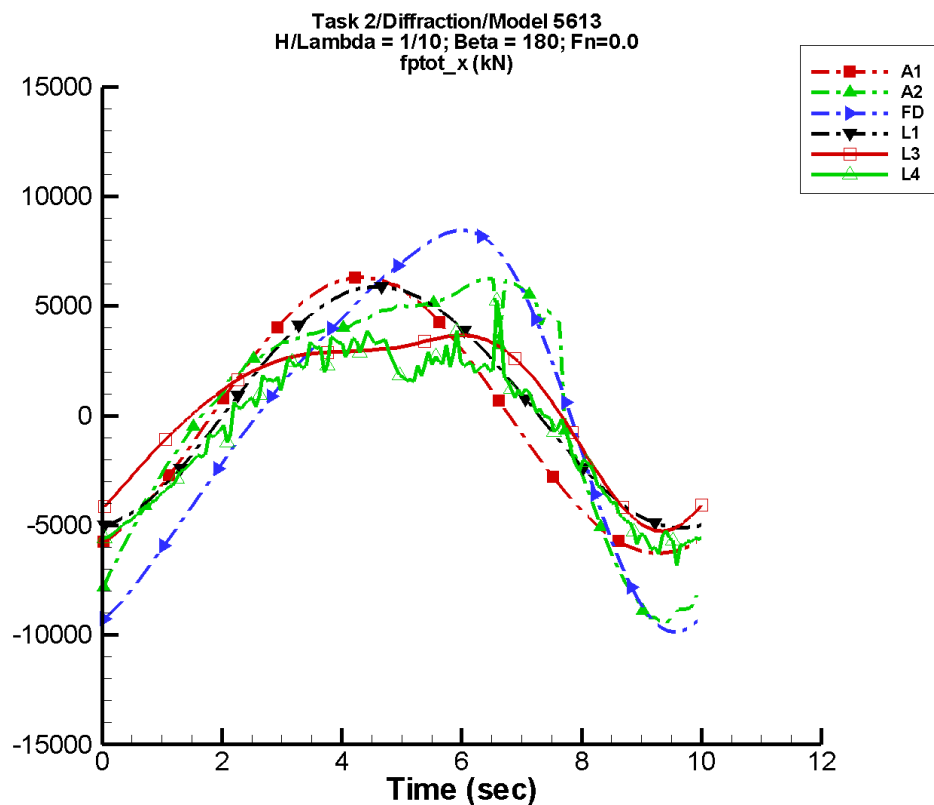Table G–727. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	6.55E+04	1.43E+04	23	4.38E+03	128
FD	6.83E+04	1.27E+04	33	6.02E+03	165
L1	8.56E+04	2.52E-02	89	1.58E-02	143
L3	6.84E+04	1.26E+04	35	5.87E+03	174
L4	6.84E+04	1.26E+04	35	5.87E+03	174
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–728. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
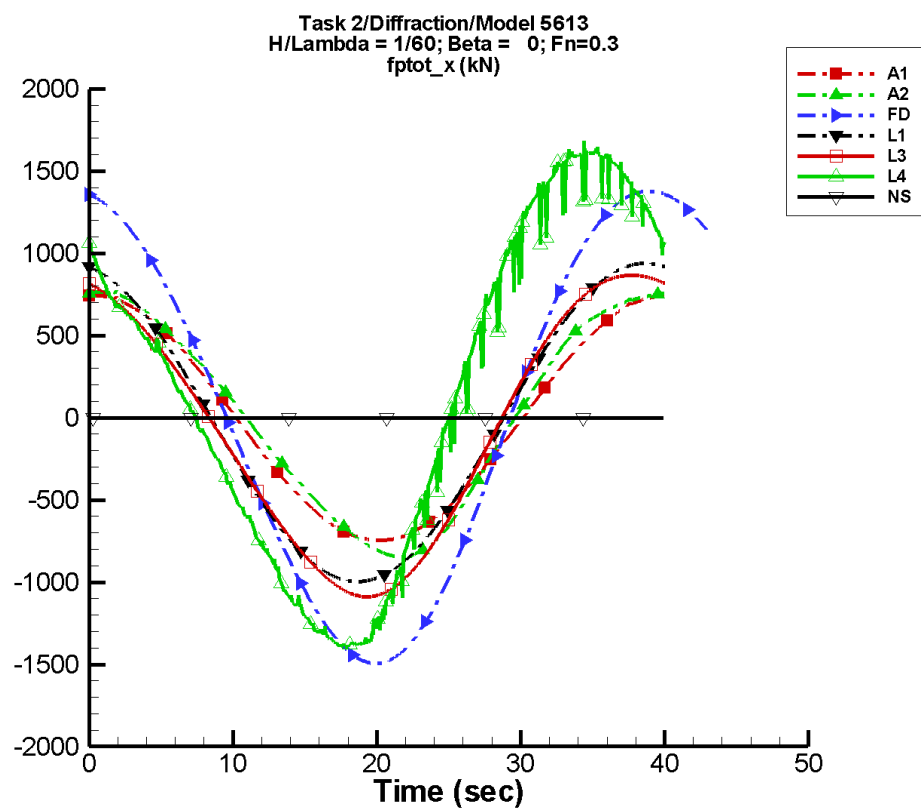
Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	3.46E+04	7.80E+04	4.52E+04	7.75E+04
FD	5.01E+04	8.22E+04	5.05E+04	7.95E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	5.02E+04	8.14E+04	5.07E+04	7.94E+04
L4	5.02E+04	8.14E+04	5.07E+04	7.94E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–365. Time history of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–729. Coefficients of the Fourier fit $a_0+a_1 \sin (\omega t + \Phi_1)+a_2 \sin (2\omega t + \Phi_2)+$ $\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	8.50E+04	798.	152	592.	-33
FD	8.49E+04	480.	82	325.	-70
L1	8.56E+04	5.15E-02	140	3.61E-02	-168
L3	8.51E+04	489.	87	324.	-64
L4	8.51E+04	489.	87	324.	-64
NF	—	—	—	—	—
NS	8.47E+04	156.	8	63.6	-82

Table G–730. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
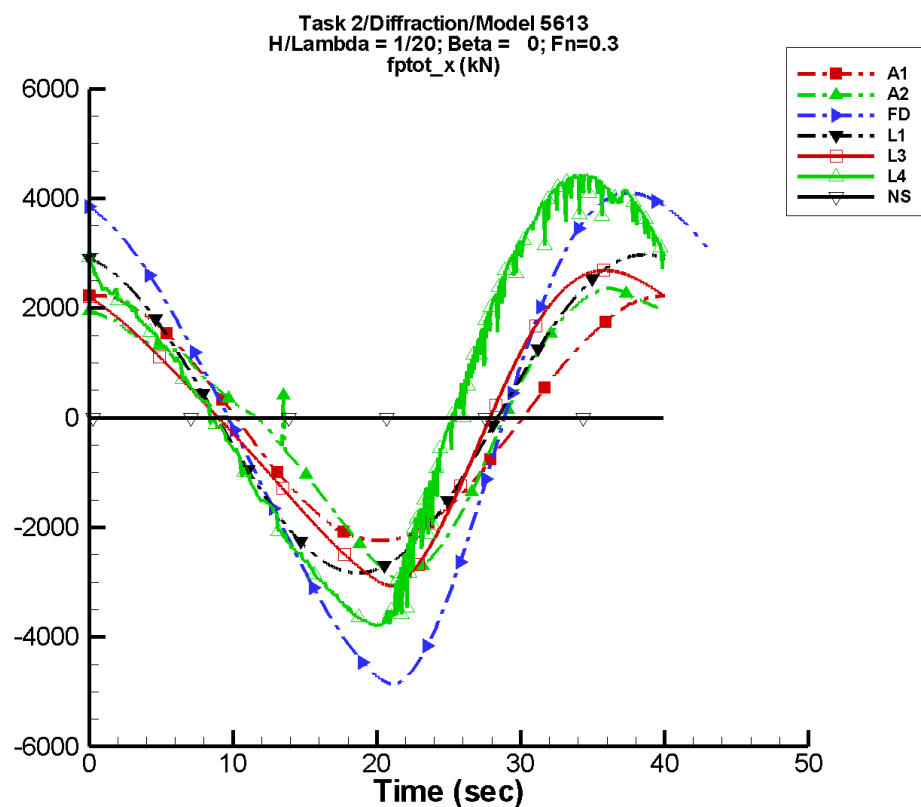
Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	8.37E+04	8.60E+04	8.37E+04	8.60E+04
FD	8.40E+04	8.54E+04	8.40E+04	8.53E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	8.43E+04	8.56E+04	8.43E+04	8.56E+04
L4	8.43E+04	8.56E+04	8.43E+04	8.56E+04
NF	—	—	—	—
NS	8.45E+04	8.49E+04	8.45E+04	8.49E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–366. Time history of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
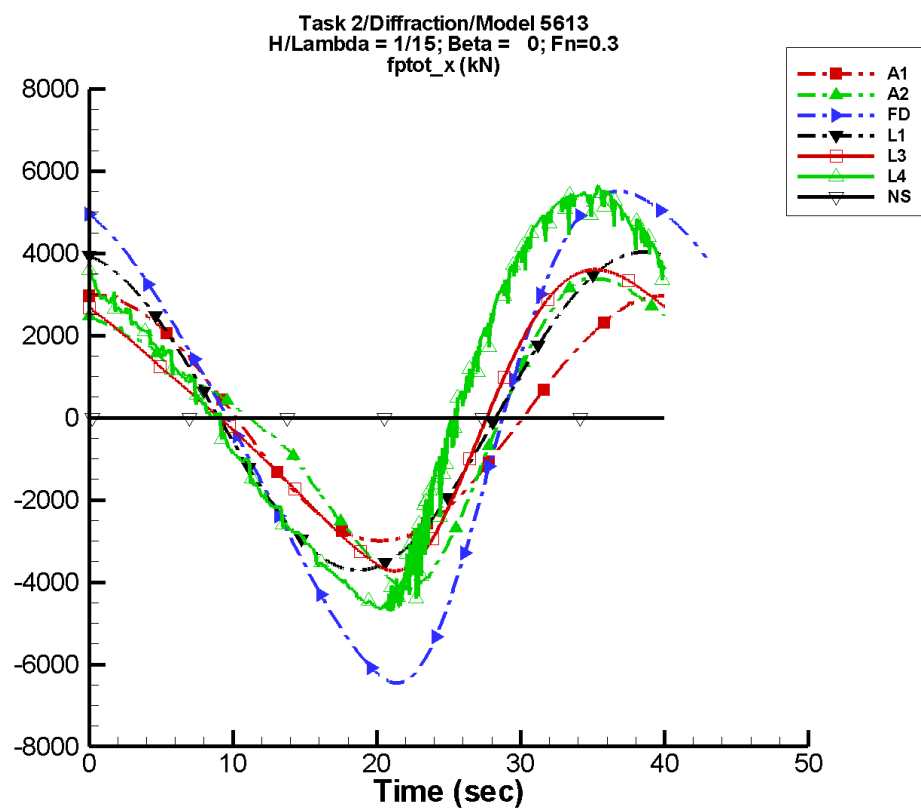
Table G–731. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} + \cdots$ of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	8.13E+04	4.61E+03	56	2.32E+03	-113
FD	8.16E+04	4.38E+03	43	2.00E+03	-124
L1	8.56E+04	5.15E-02	140	3.61E-02	-168
L3	8.19E+04	4.47E+03	47	1.90E+03	-118
L4	8.19E+04	4.47E+03	47	1.90E+03	-118
NF	—	—	—	—	—
NS	8.18E+04	3.63E+03	39	1.85E+03	-113

Table G–732. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	7.29E+04	8.64E+04	7.32E+04	8.59E+04
FD	7.38E+04	8.61E+04	7.42E+04	8.61E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	7.41E+04	8.65E+04	7.43E+04	8.64E+04
L4	7.41E+04	8.65E+04	7.43E+04	8.64E+04
NF	—	—	—	—
NS	7.48E+04	8.58E+04	7.52E+04	8.59E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–367. Time history of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
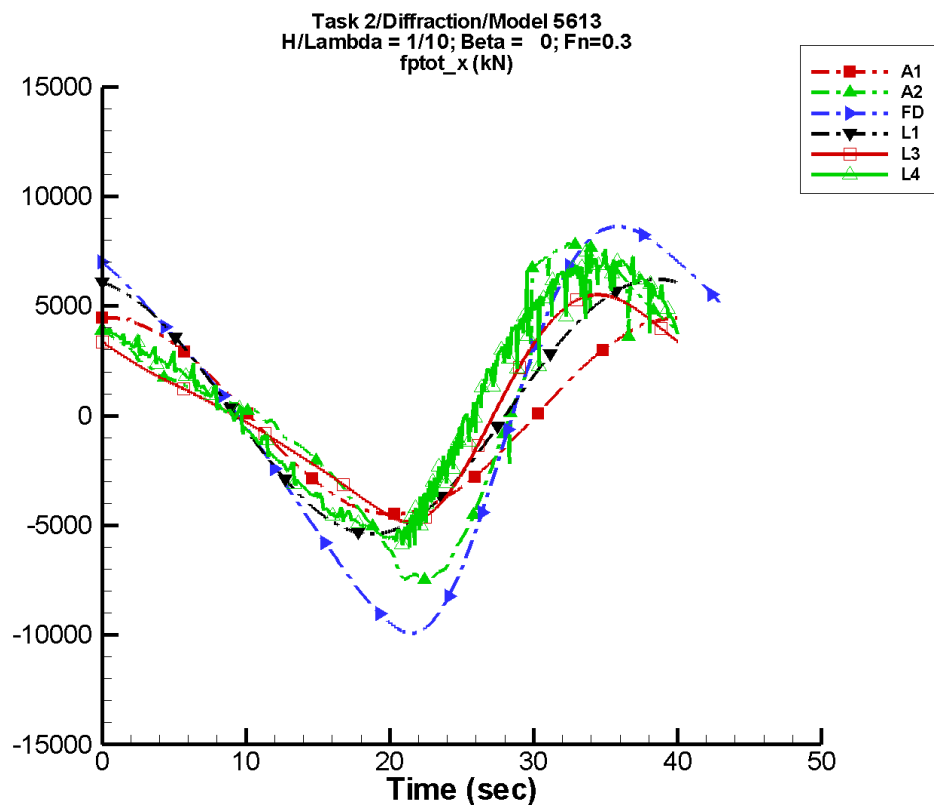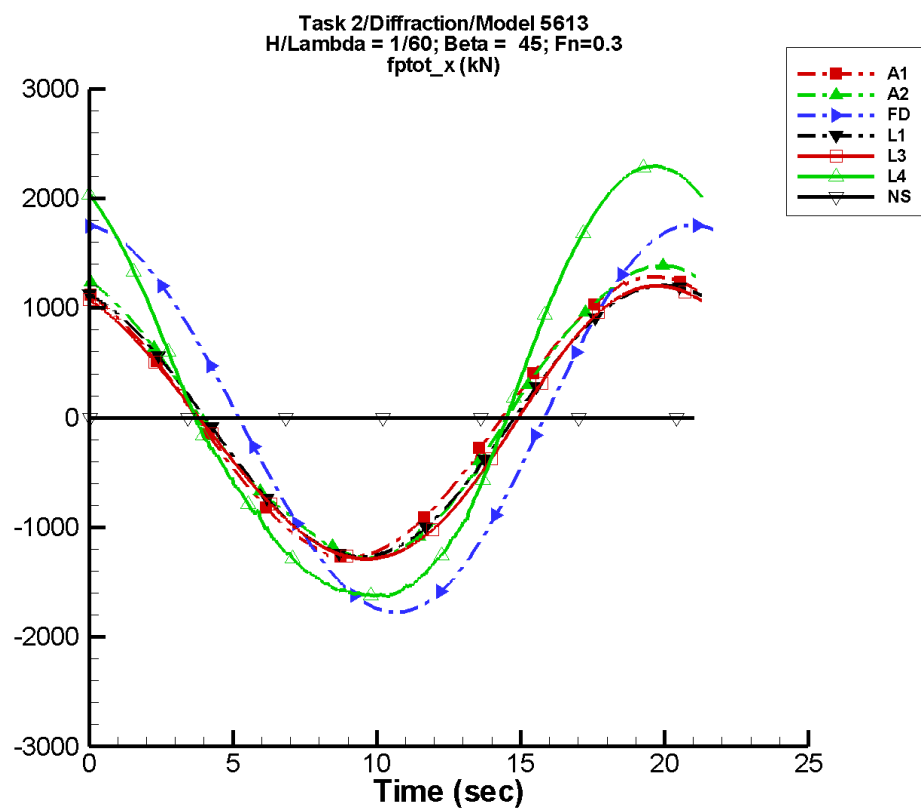
Table G–733. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	7.62E+04	1.20E+04	20	2.36E+03	-148
FD	7.63E+04	1.14E+04	17	1.99E+03	-171
L1	8.56E+04	5.15E-02	140	3.61E-02	-168
L3	7.65E+04	1.19E+04	21	1.83E+03	-177
L4	7.65E+04	1.19E+04	21	1.83E+03	-177
NF	—	—	—	—	—
NS	7.58E+04	9.43E+03	12	2.00E+03	-148

Table G–734. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	5.71E+04	8.82E+04	5.95E+04	8.81E+04
FD	5.75E+04	8.73E+04	6.00E+04	8.71E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	5.76E+04	8.78E+04	5.90E+04	8.77E+04
L4	5.76E+04	8.78E+04	5.90E+04	8.77E+04
NF	—	—	—	—
NS	6.03E+04	8.49E+04	6.15E+04	8.48E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–368. Time history of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
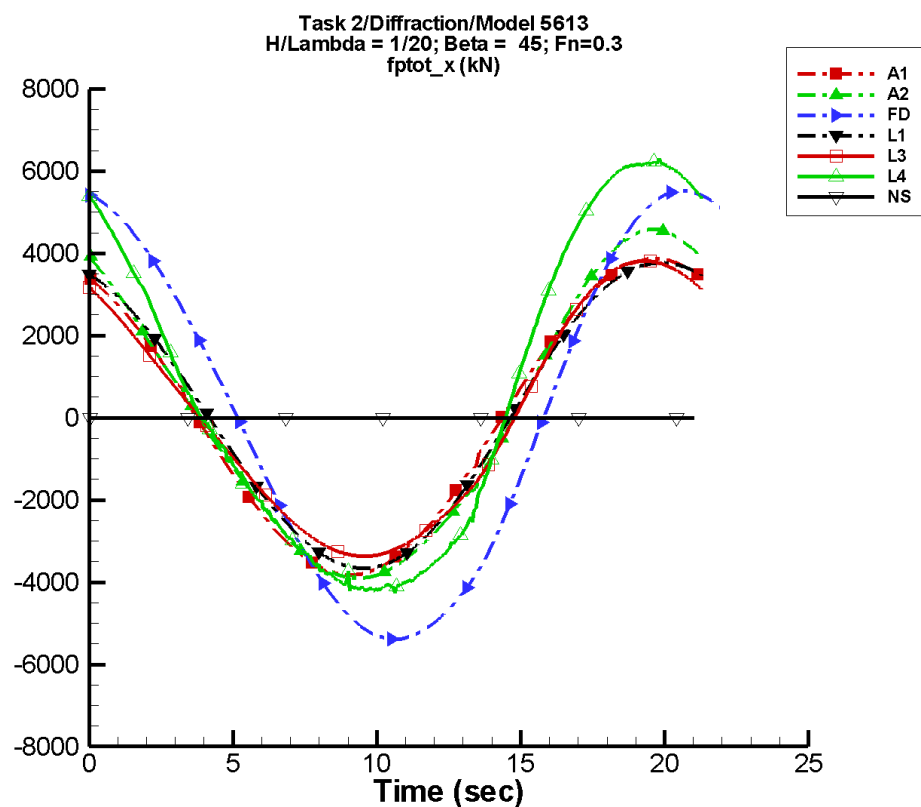
Table G–735. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	6.71E+04	3.02E+04	15	1.13E+04	78
FD	6.86E+04	2.98E+04	13	9.85E+03	83
L1	8.56E+04	5.15E-02	140	3.61E-02	-168
L3	6.87E+04	2.99E+04	16	9.85E+03	90
L4	6.87E+04	2.99E+04	16	9.85E+03	90
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–736. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	2.64E+04	1.00E+05	3.11E+04	9.84E+04
FD	3.07E+04	9.88E+04	3.14E+04	9.83E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	3.04E+04	9.95E+04	3.11E+04	9.78E+04
L4	3.04E+04	9.95E+04	3.11E+04	9.78E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–369. Time history of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
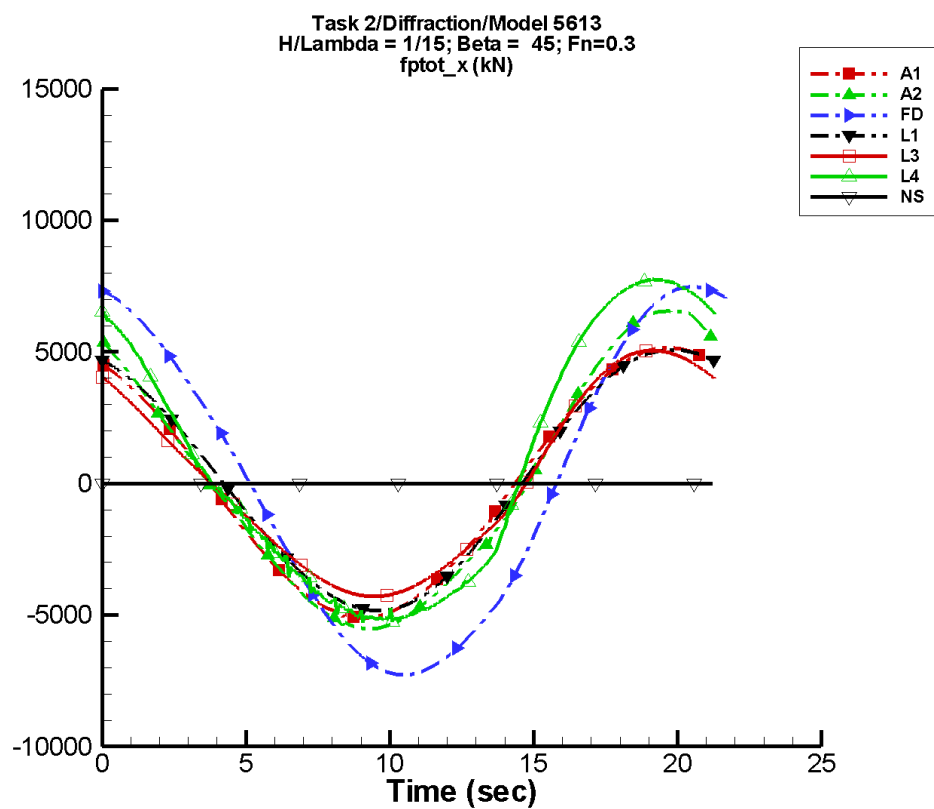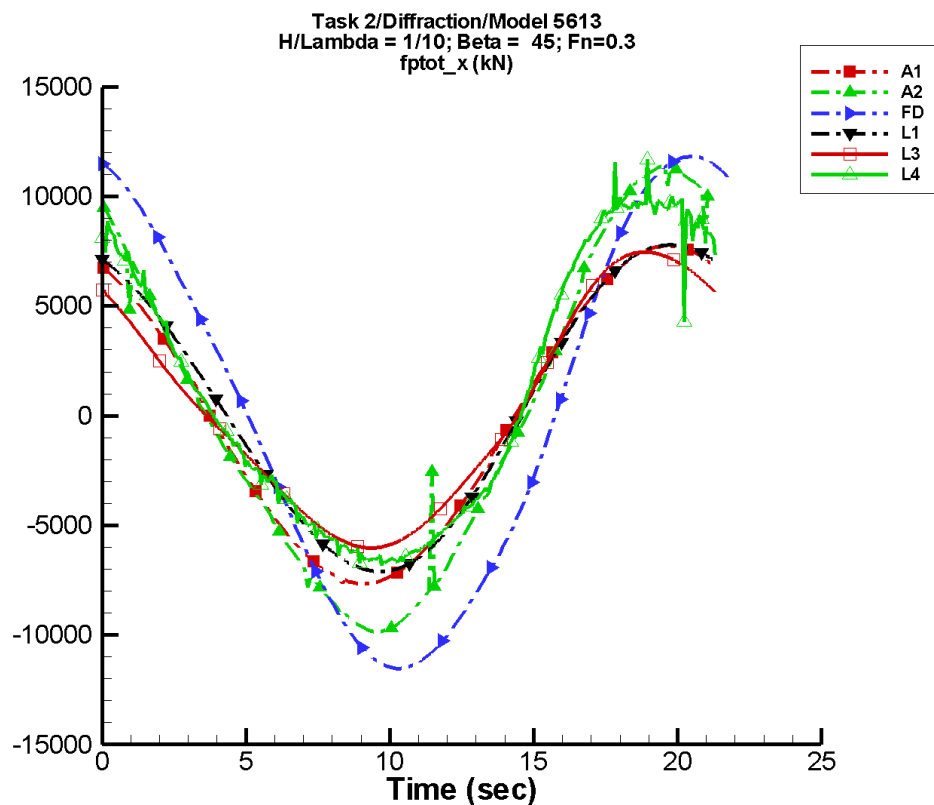
Table G–737. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	8.50E+04	701.	-8	647.	73
FD	8.49E+04	1.03E+03	-9	338.	72
L1	8.56E+04	2.40E-02	-144	1.75E-02	165
L3	8.51E+04	1.04E+03	-5	316.	85
L4	8.51E+04	1.04E+03	-5	316.	85
NF	—	—	—	—	—
NS	8.47E+04	382.	-5	81.8	86

Table G–738. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	8.39E+04	8.57E+04	8.39E+04	8.57E+04
FD	8.34E+04	8.57E+04	8.34E+04	8.57E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	8.36E+04	8.60E+04	8.36E+04	8.60E+04
L4	8.36E+04	8.60E+04	8.36E+04	8.60E+04
NF	—	—	—	—
NS	8.42E+04	8.50E+04	8.42E+04	8.50E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.0
fhst_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–370. Time history of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
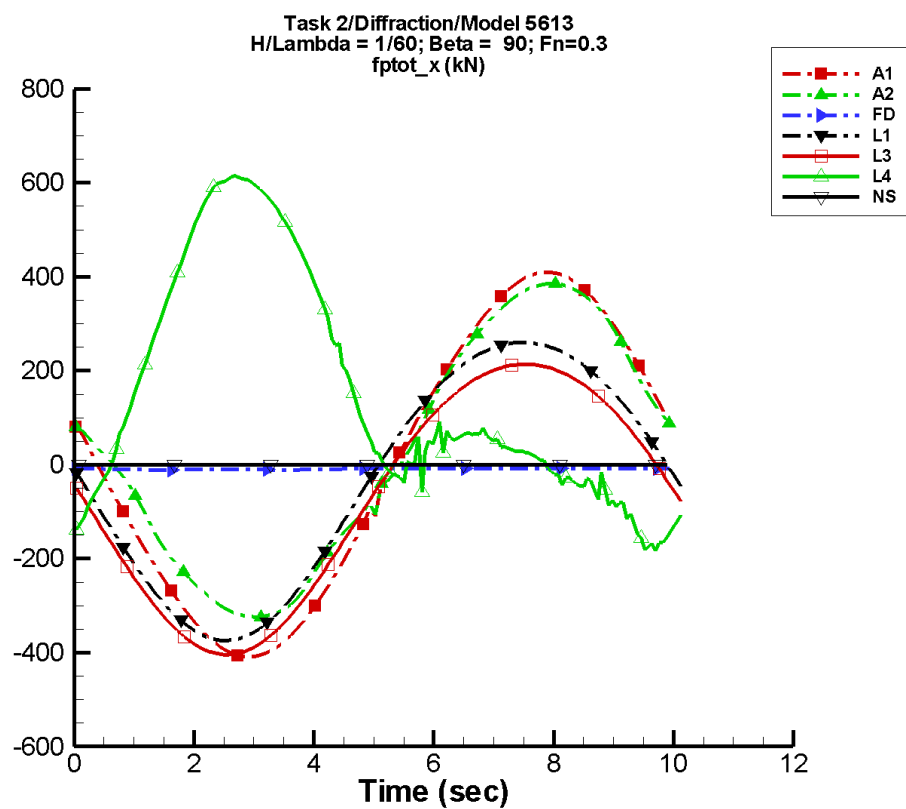
Table G–739. Coefficients of the Fourier fit $a_0+a_1 \sin{(\omega t + \Phi_1)}+a_2 \sin{(2\omega t + \Phi_2)}+$ $\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	8.12E+04	9.18E+03	-10	3.44E+03	76
FD	8.14E+04	9.74E+03	-9	3.45E+03	71
L1	8.56E+04	2.40E-02	-144	1.75E-02	165
L3	8.19E+04	9.71E+03	-5	3.15E+03	85
L4	8.19E+04	9.71E+03	-5	3.15E+03	85
NF	—	—	—	—	—
NS	8.20E+04	6.99E+03	-6	2.68E+03	82

Table G–740. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
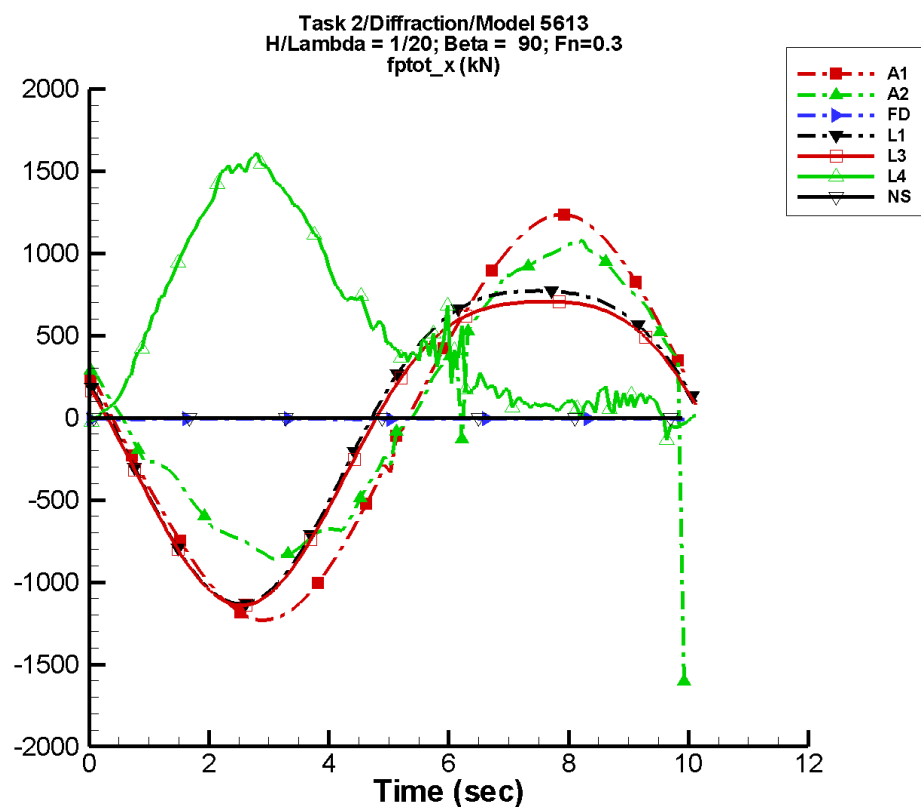
	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(kN)	(kN)	(kN)	(kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	6.58E+04	8.92E+04	6.67E+04	8.91E+04
FD	6.63E+04	8.90E+04	6.66E+04	8.90E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	6.70E+04	8.95E+04	6.71E+04	8.95E+04
L4	6.70E+04	8.95E+04	6.71E+04	8.95E+04
NF	—	—	—	—
NS	7.00E+04	8.74E+04	7.08E+04	8.74E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.0
fhst_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–371. Time history of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
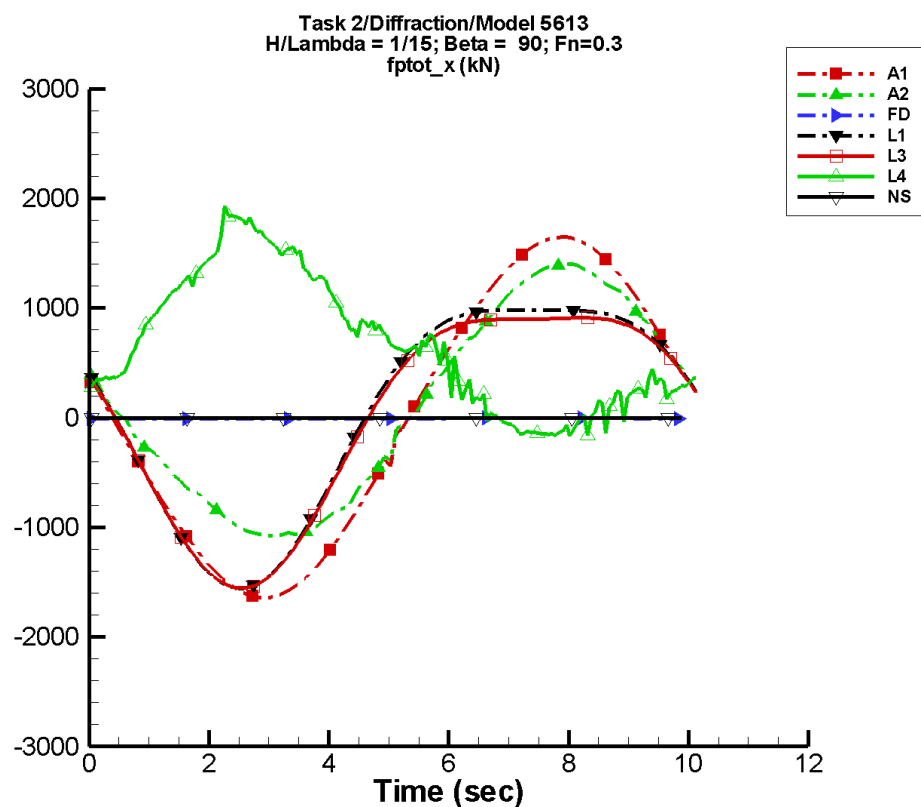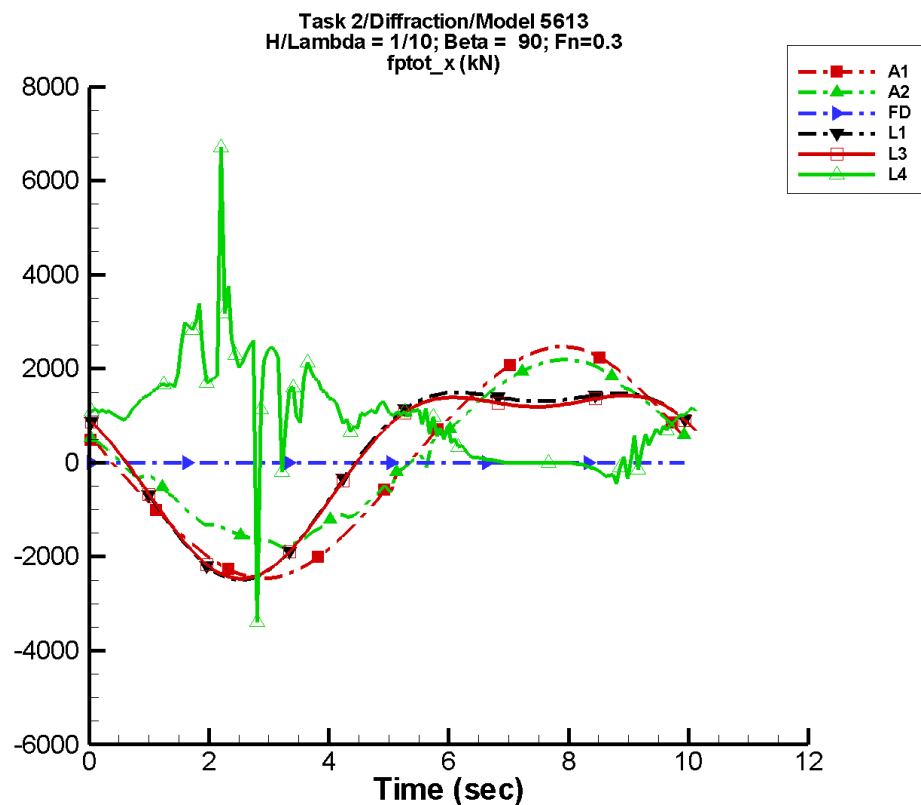
Table G–741. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	7.58E+04	2.24E+04	-10	9.29E+03	75
FD	7.56E+04	2.22E+04	-10	9.81E+03	69
L1	8.56E+04	2.40E-02	-144	1.75E-02	165
L3	7.65E+04	2.21E+04	-6	9.02E+03	85
L4	7.65E+04	2.21E+04	-6	9.02E+03	85
NF	—	—	—	—	—
NS	7.67E+04	1.45E+04	-5	6.54E+03	84

Table G–742. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	3.26E+04	9.39E+04	3.59E+04	9.35E+04
FD	3.33E+04	9.20E+04	3.57E+04	9.18E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	3.37E+04	9.26E+04	3.50E+04	9.26E+04
L4	3.37E+04	9.26E+04	3.50E+04	9.26E+04
NF	—	—	—	—
NS	4.86E+04	8.73E+04	4.96E+04	8.73E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.0
fhst_z (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–372. Time history of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
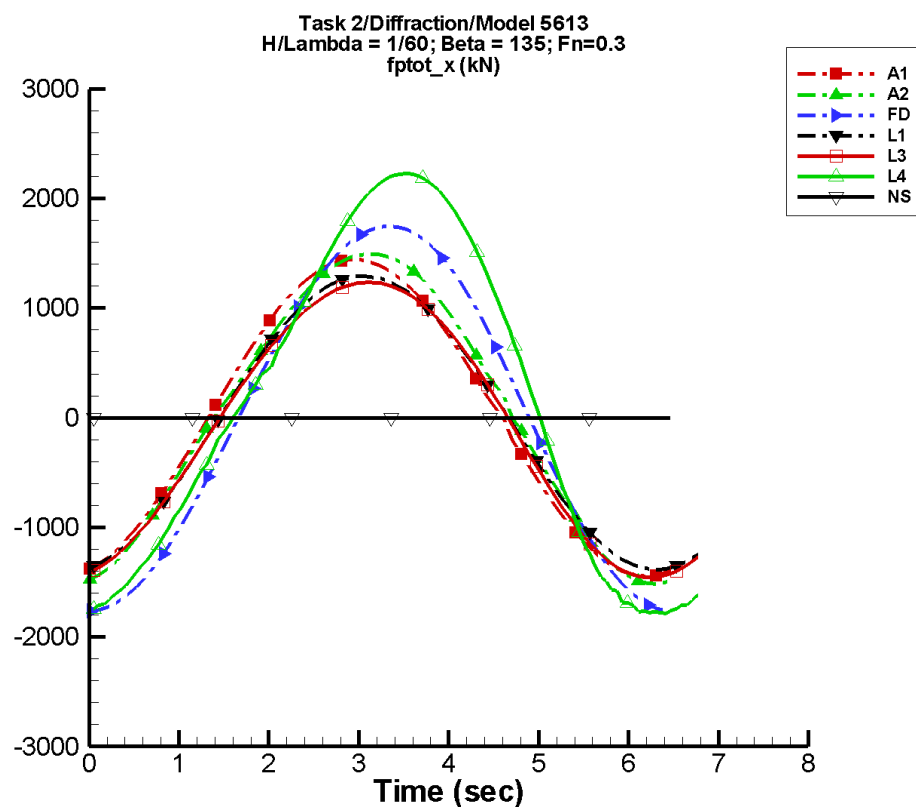
Table G–743. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	6.71E+04	5.70E+04	-9	1.18E+04	82
FD	6.79E+04	5.79E+04	-9	1.02E+04	71
L1	8.56E+04	2.40E-02	-144	1.75E-02	165
L3	6.88E+04	5.88E+04	-6	9.46E+03	94
L4	6.88E+04	5.88E+04	-6	9.46E+03	94
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–744. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	-660.	1.32E+05	-1.04E+03	1.30E+05
FD	-0.00	1.34E+05	-437.	1.32E+05
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	0.00	1.33E+05	-90.2	1.34E+05
L4	0.00	1.33E+05	-90.2	1.34E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–373. Time history of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–745. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
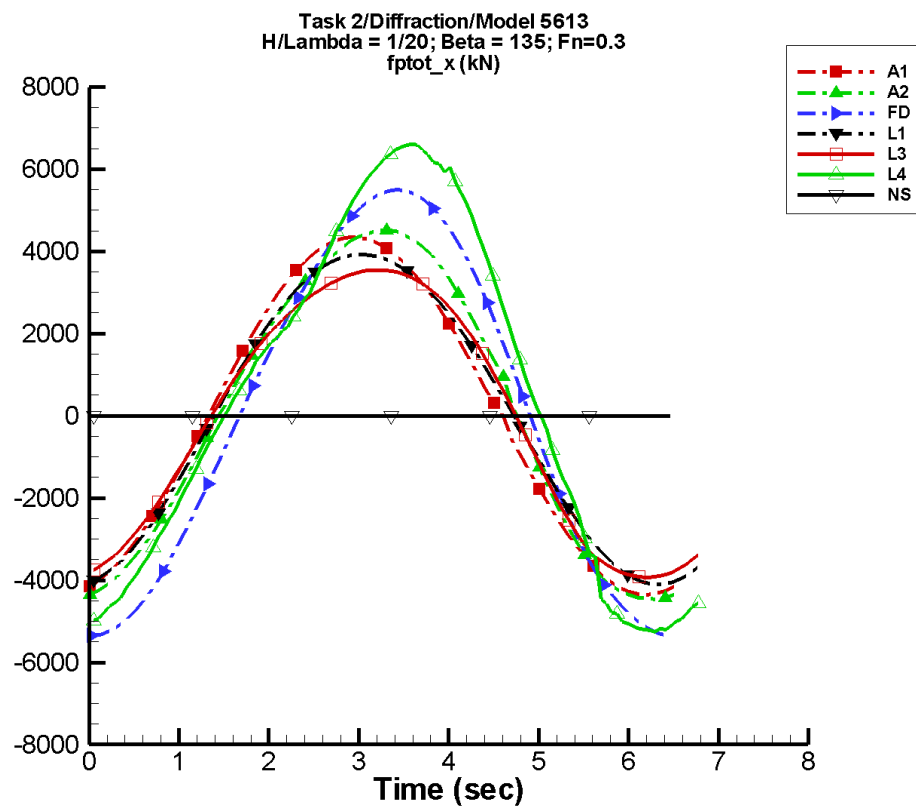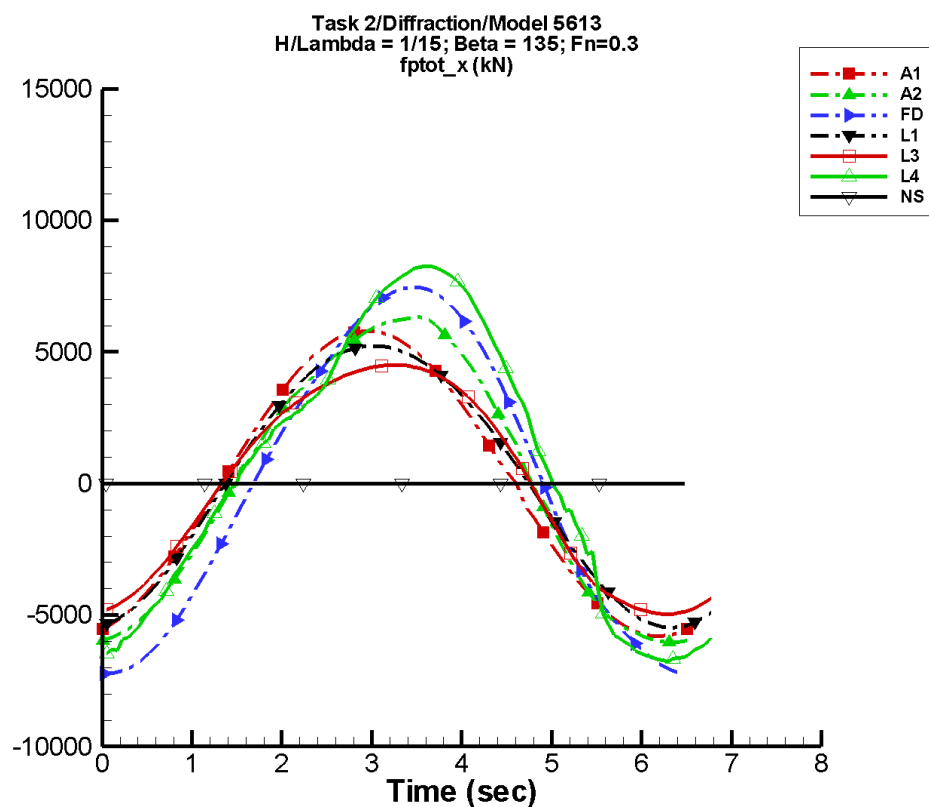
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	8.50E+04	802.	-169	555.	180
FD	8.49E+04	494.	-96	302.	-140
L1	8.56E+04	6.07E-03	131	1.14E-02	38
L3	8.51E+04	488.	-94	305.	-136
L4	8.51E+04	488.	-94	305.	-136
NF	—	—	—	—	—
NS	8.47E+04	160.	-16	70.5	-111

Table G–746. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	8.37E+04	8.60E+04	8.37E+04	8.60E+04
FD	8.40E+04	8.54E+04	8.40E+04	8.53E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	8.43E+04	8.56E+04	8.43E+04	8.56E+04
L4	8.43E+04	8.56E+04	8.43E+04	8.56E+04
NF	—	—	—	—
NS	8.45E+04	8.49E+04	8.46E+04	8.49E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 135; Fn=0.0
fhst_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–374. Time history of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
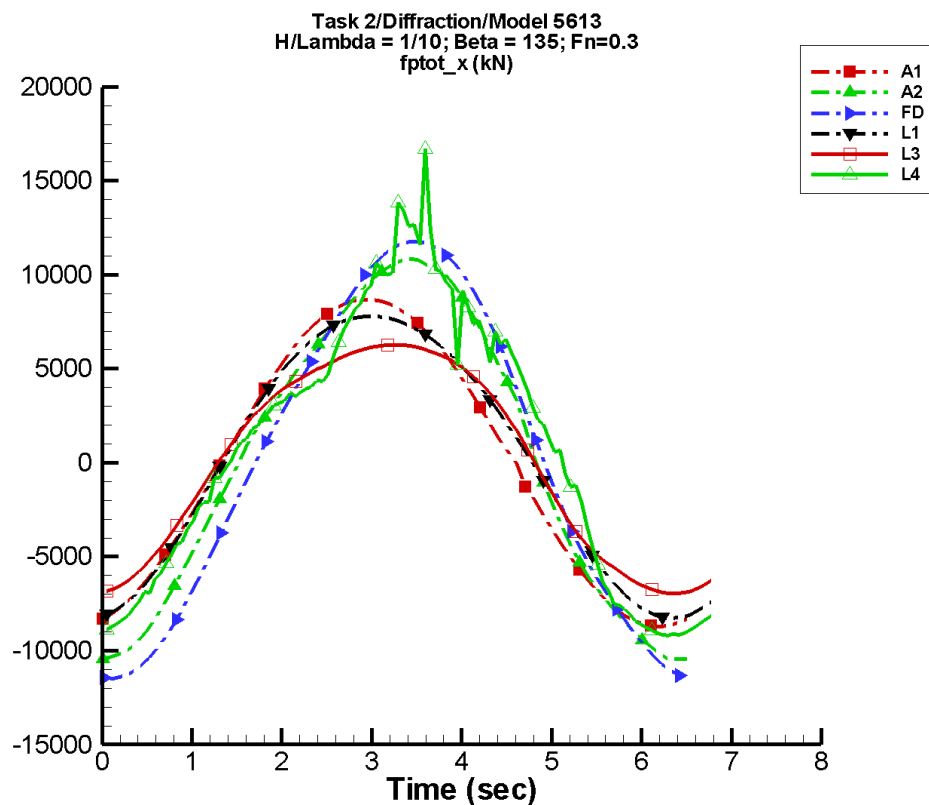
Table G–747. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	8.13E+04	4.48E+03	-69	2.41E+03	-96
FD	8.16E+04	4.27E+03	-56	1.77E+03	-92
L1	8.56E+04	6.07E-03	131	1.14E-02	38
L3	8.19E+04	4.36E+03	-55	1.94E+03	-84
L4	8.19E+04	4.36E+03	-55	1.94E+03	-84
NF	—	—	—	—	—
NS	8.18E+04	3.51E+03	-45	1.88E+03	-84

Table G–748. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	7.29E+04	8.60E+04	7.33E+04	8.58E+04
FD	7.38E+04	8.61E+04	7.42E+04	8.61E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	7.41E+04	8.65E+04	7.43E+04	8.64E+04
L4	7.41E+04	8.65E+04	7.43E+04	8.64E+04
NF	—	—	—	—
NS	7.50E+04	8.59E+04	7.54E+04	8.58E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.0
fhst_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–375. Time history of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
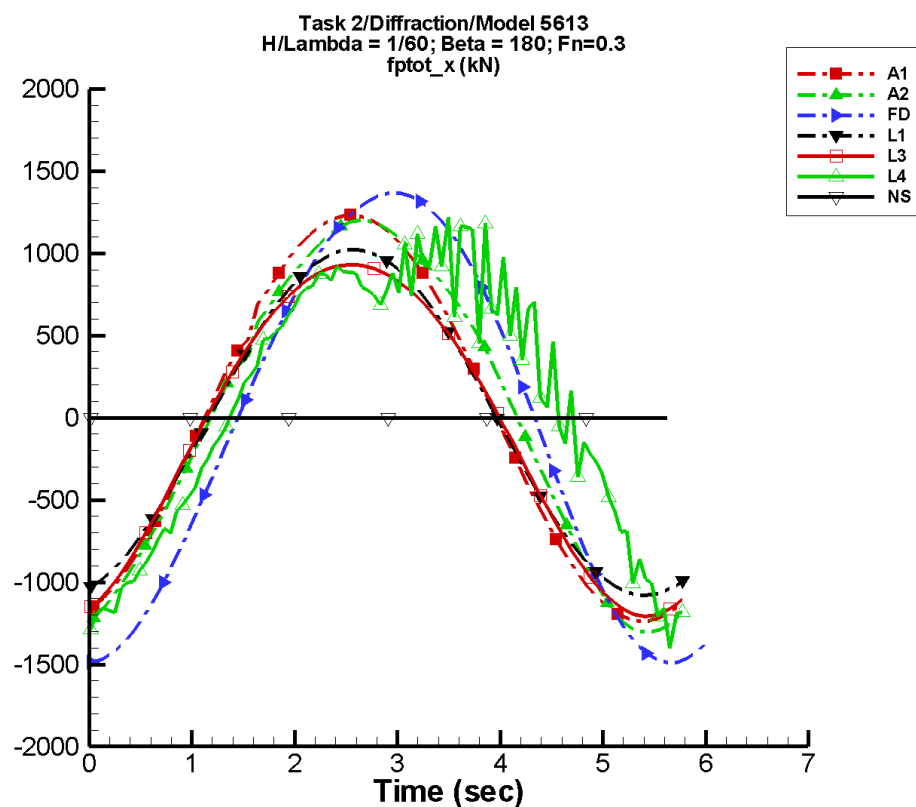
Table G–749. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$,
$F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	7.62E+04	1.17E+04	-35	2.31E+03	-54
FD	7.63E+04	1.10E+04	-31	1.60E+03	-56
L1	8.56E+04	6.07E-03	131	1.14E-02	38
L3	7.65E+04	1.15E+04	-29	1.94E+03	-41
L4	7.65E+04	1.15E+04	-29	1.94E+03	-41
NF	—	—	—	—	—
NS	7.58E+04	9.15E+03	-17	2.07E+03	-45

Table G–750. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/15$,
$\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

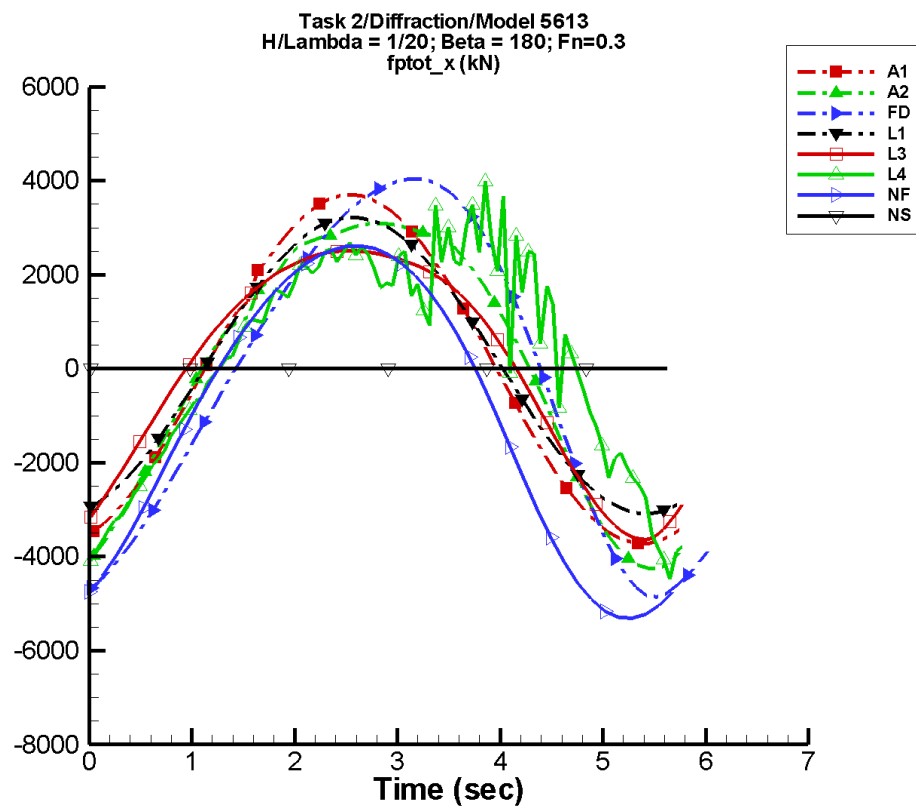| Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	5.69E+04	8.81E+04	5.93E+04	8.79E+04
FD	5.75E+04	8.73E+04	6.00E+04	8.72E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	5.76E+04	8.78E+04	5.89E+04	8.77E+04
L4	5.76E+04	8.78E+04	5.89E+04	8.77E+04
NF	—	—	—	—
NS	6.09E+04	8.49E+04	6.24E+04	8.49E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–376. Time history of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
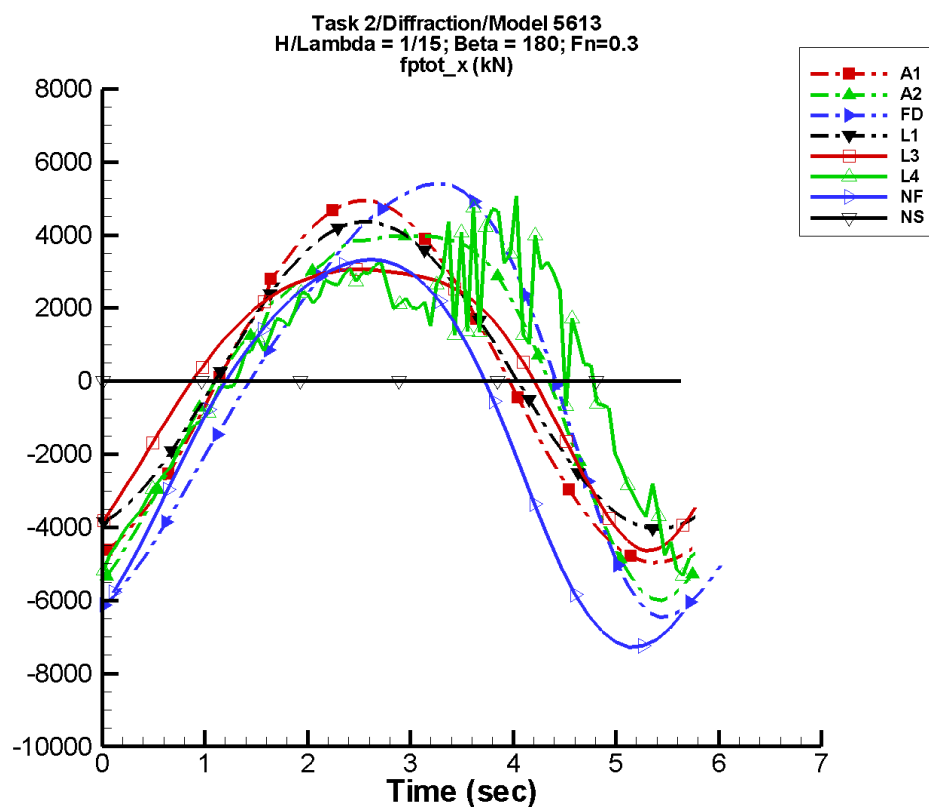
Table G–751. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	6.76E+04	3.07E+04	-30	1.09E+04	74
FD	6.84E+04	3.04E+04	-28	1.04E+04	68
L1	8.56E+04	6.07E-03	131	1.14E-02	38
L3	6.87E+04	3.02E+04	-24	1.01E+04	76
L4	6.87E+04	3.02E+04	-24	1.01E+04	76
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–752. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	2.54E+04	1.00E+05	3.07E+04	9.84E+04
FD	3.06E+04	9.86E+04	3.12E+04	9.74E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	3.04E+04	9.92E+04	3.11E+04	9.79E+04
L4	3.04E+04	9.92E+04	3.11E+04	9.79E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–377. Time history of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
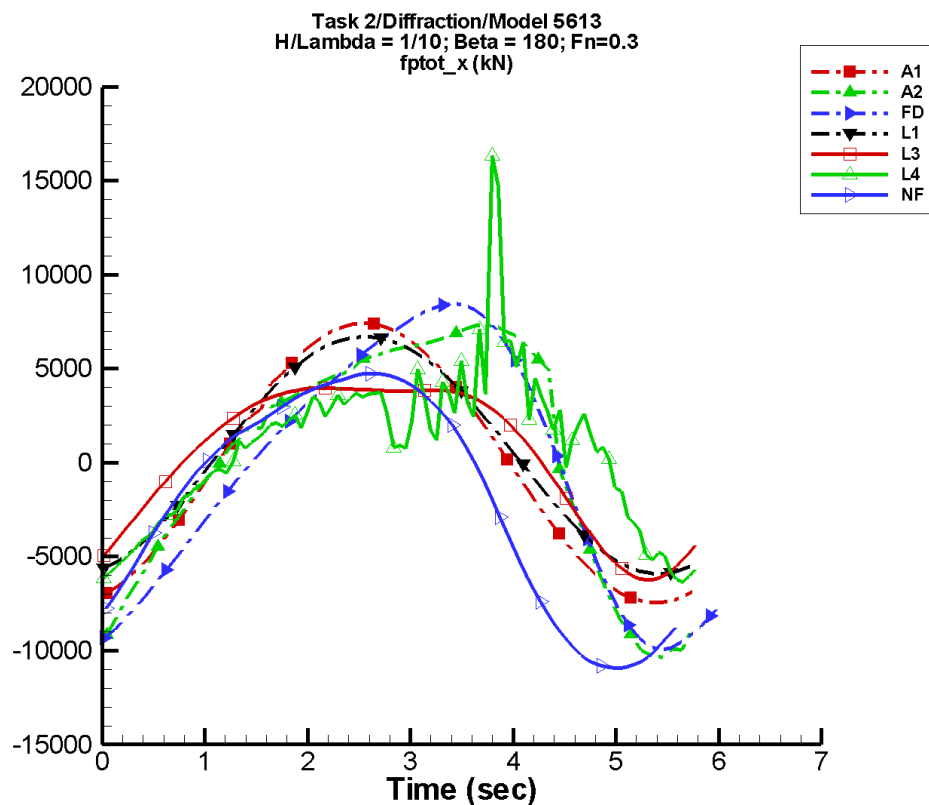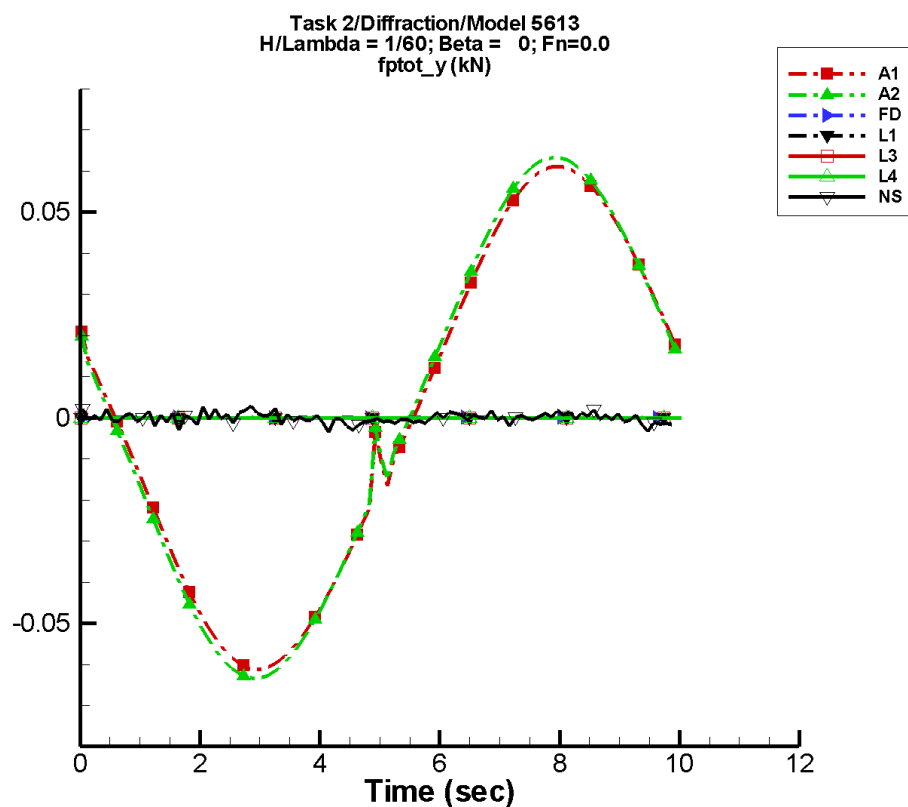
Table G–753. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	8.50E+04	1.52E+03	174	601.	148
FD	8.49E+04	535.	-165	280.	139
L1	8.56E+04	2.09E-02	137	1.98E-02	120
L3	8.51E+04	539.	-161	272.	145
L4	8.51E+04	539.	-161	272.	145
NF	—	—	—	—	—
NS	8.47E+04	42.0	-125	79.0	-160

Table G–754. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	8.32E+04	8.68E+04	8.32E+04	8.68E+04
FD	8.40E+04	8.52E+04	8.40E+04	8.52E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	8.43E+04	8.55E+04	8.43E+04	8.55E+04
L4	8.43E+04	8.55E+04	8.43E+04	8.55E+04
NF	—	—	—	—
NS	8.45E+04	8.48E+04	8.45E+04	8.48E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 180; Fn=0.0
fhst_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–378. Time history of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–755. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$,
$F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of
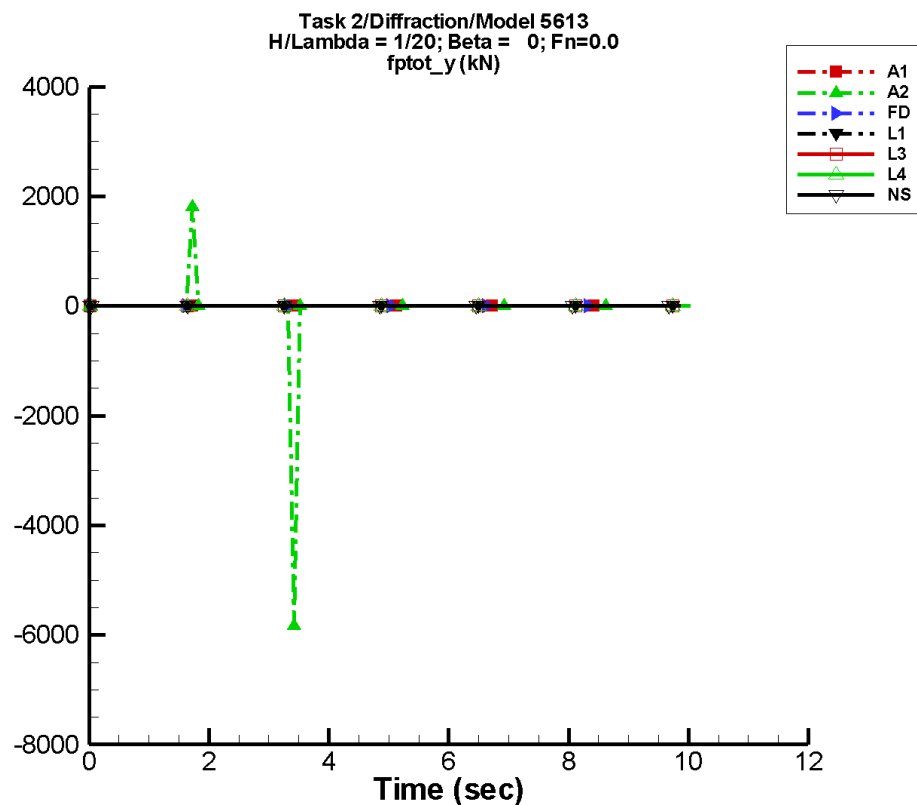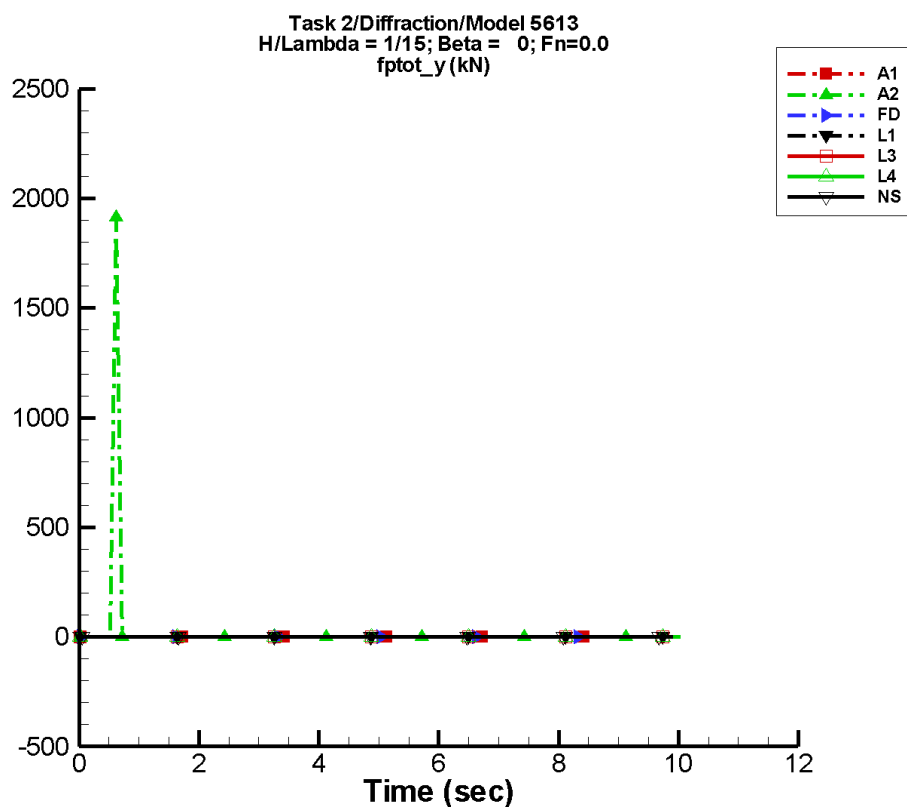Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	8.13E+04	4.17E+03	-128	2.51E+03	-136
FD	8.14E+04	3.00E+03	-119	1.88E+03	-140
L1	8.56E+04	2.09E-02	137	1.98E-02	120
L3	8.18E+04	3.08E+03	-118	1.86E+03	-131
L4	8.18E+04	3.08E+03	-118	1.86E+03	-131
NF	—	—	—	—	—
NS	8.14E+04	2.55E+03	-103	2.18E+03	-129

Table G–756. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/20$,
$\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	7.28E+04	8.48E+04	7.30E+04	8.47E+04
FD	7.46E+04	8.35E+04	7.48E+04	8.36E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	7.49E+04	8.40E+04	7.50E+04	8.40E+04
L4	7.49E+04	8.40E+04	7.50E+04	8.40E+04
NF	—	—	—	—
NS	7.51E+04	8.39E+04	7.51E+04	8.37E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 180; Fn=0.0
fhst_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–379. Time history of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
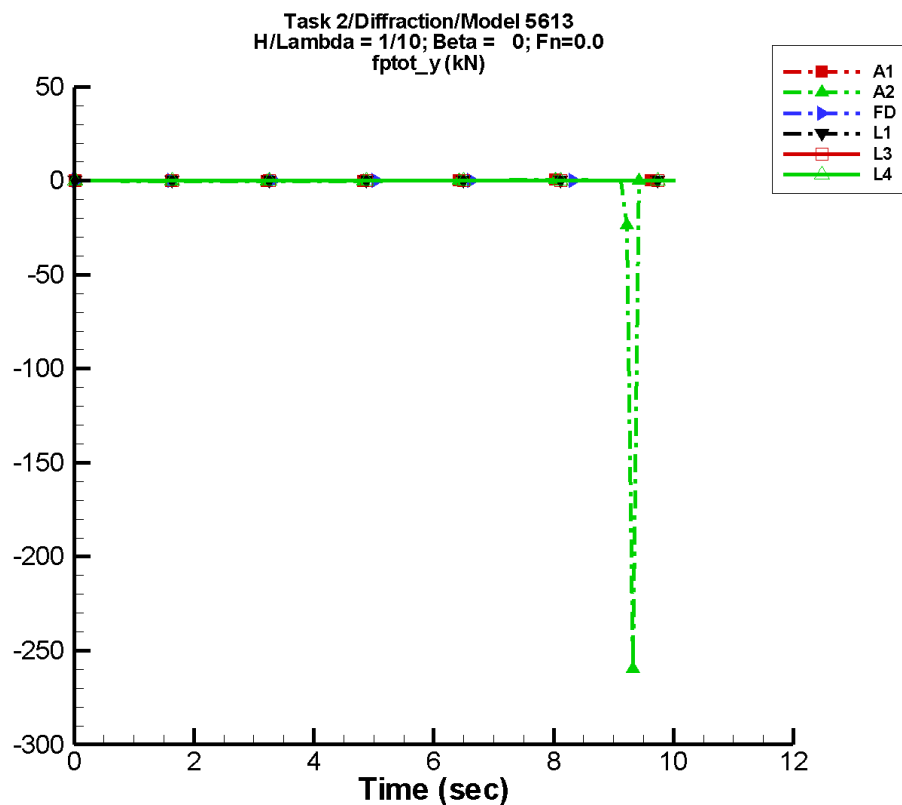
Table G–757. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	7.62E+04	5.77E+03	-70	3.86E+03	-97
FD	7.62E+04	5.04E+03	-61	3.13E+03	-100
L1	8.56E+04	2.09E-02	137	1.98E-02	120
L3	7.66E+04	5.02E+03	-60	3.21E+03	-92
L4	7.66E+04	5.02E+03	-60	3.21E+03	-92
NF	—	—	—	—	—
NS	7.47E+04	5.56E+03	-34	3.30E+03	-85

Table G–758. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	6.42E+04	8.28E+04	6.48E+04	8.26E+04
FD	6.56E+04	8.24E+04	6.62E+04	8.22E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	6.58E+04	8.27E+04	6.59E+04	8.26E+04
L4	6.58E+04	8.27E+04	6.59E+04	8.26E+04
NF	—	—	—	—
NS	6.33E+04	8.31E+04	6.44E+04	8.28E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–380. Time history of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
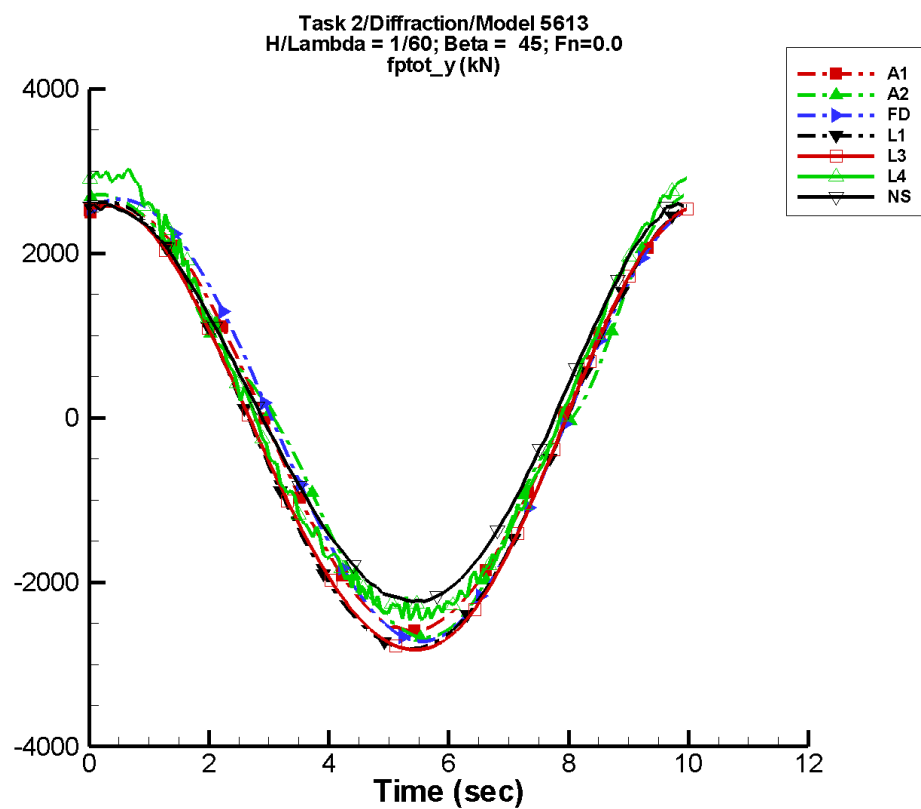
Table G–759. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	6.53E+04	1.49E+04	-40	4.30E+03	29
FD	6.84E+04	1.29E+04	-51	6.51E+03	-17
L1	8.56E+04	2.09E-02	137	1.98E-02	120
L3	6.85E+04	1.29E+04	-46	6.44E+03	-11
L4	6.85E+04	1.29E+04	-46	6.44E+03	-11
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–760. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
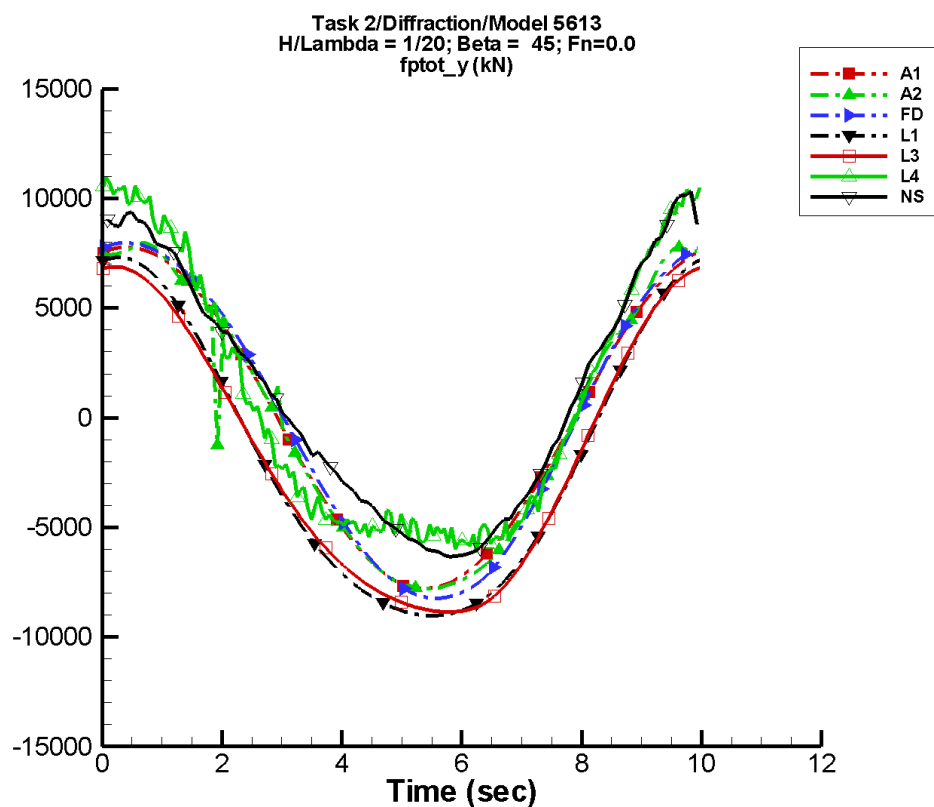
Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	3.33E+04	7.80E+04	4.41E+04	7.75E+04
FD	5.02E+04	8.15E+04	5.05E+04	7.91E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	5.02E+04	8.14E+04	5.07E+04	7.94E+04
L4	5.02E+04	8.14E+04	5.07E+04	7.94E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–381. Time history of F_z^{hst} for one period for $H/\lambda = 1/60, \lambda/L = 1, \beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
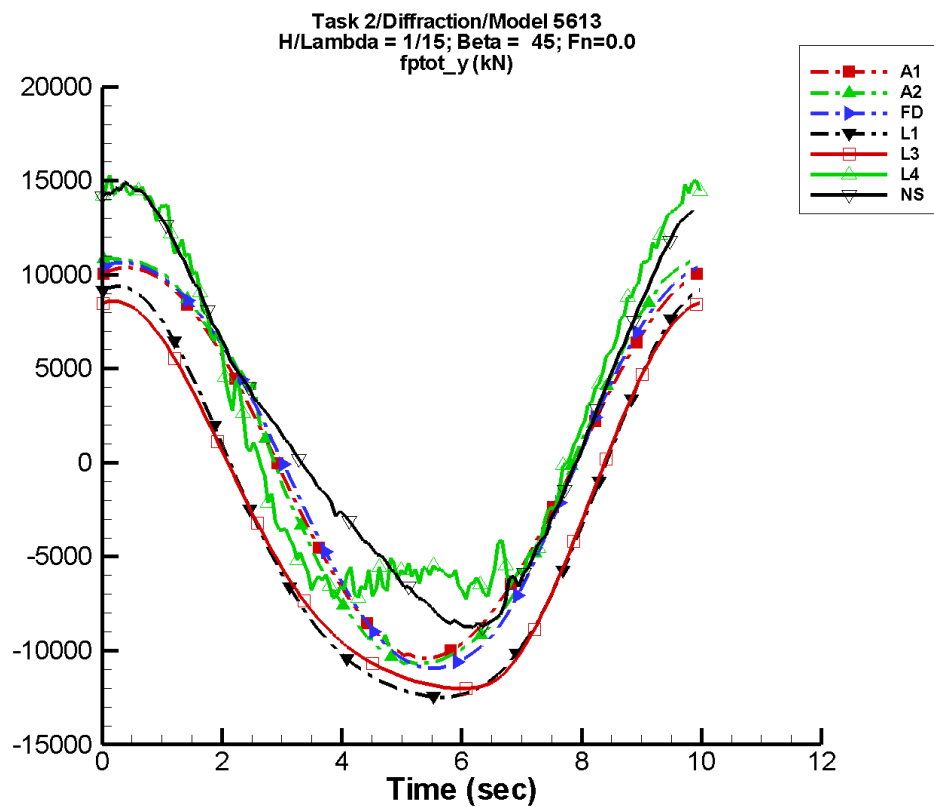
Table G–761. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$,
and period = 40.02 sec in the case 0-DOF motion in waves of Model
5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	0.128	-148	9.66E-02	-176
A2	8.50E+04	1.52E+03	178	567.	16
FD	8.49E+04	527.	155	288.	22
L1	8.56E+04	0.395	-56	0.318	-6
L3	8.51E+04	522.	156	281.	30
L4	8.51E+04	522.	156	281.	30
NF	—	—	—	—	—
NS	8.47E+04	36.5	115	76.8	-42

Table G–762. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/60$,
$\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	8.32E+04	8.68E+04	8.32E+04	8.68E+04
FD	8.40E+04	8.52E+04	8.40E+04	8.52E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	8.43E+04	8.55E+04	8.43E+04	8.55E+04
L4	8.43E+04	8.55E+04	8.43E+04	8.55E+04
NF	—	—	—	—
NS	8.45E+04	8.48E+04	8.45E+04	8.48E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–382. Time history of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
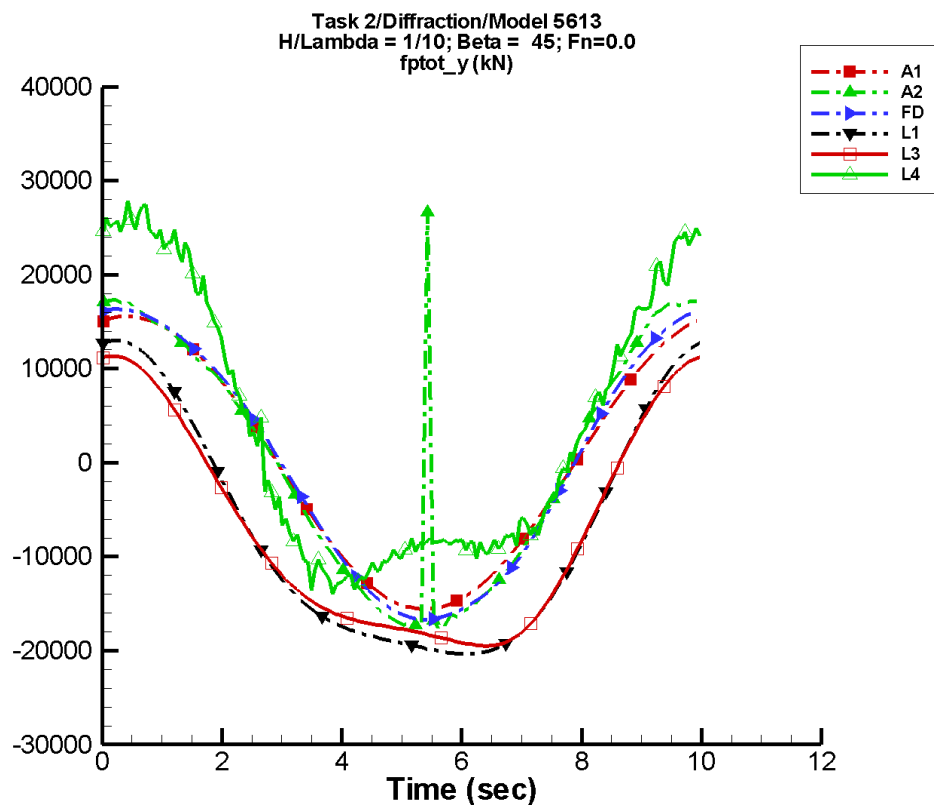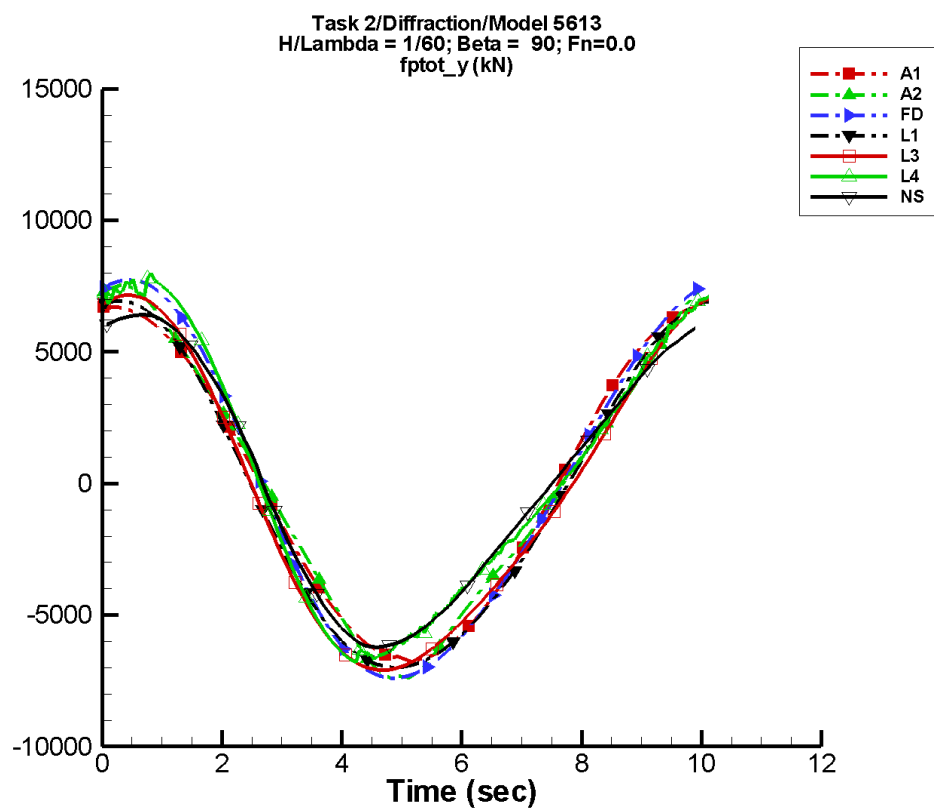
Table G–763. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	0.128	-148	9.66E-02	-176
A2	8.12E+04	4.19E+03	122	2.28E+03	-59
FD	8.15E+04	2.96E+03	112	1.97E+03	-61
L1	8.56E+04	0.395	-56	0.318	-6
L3	8.19E+04	3.01E+03	117	2.06E+03	-55
L4	8.19E+04	3.01E+03	117	2.06E+03	-55
NF	—	—	—	—	—
NS	8.14E+04	2.43E+03	99	1.97E+03	-62

Table G–764. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	7.28E+04	8.48E+04	7.30E+04	8.48E+04
FD	7.46E+04	8.35E+04	7.47E+04	8.35E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	7.49E+04	8.40E+04	7.50E+04	8.40E+04
L4	7.49E+04	8.40E+04	7.50E+04	8.40E+04
NF	—	—	—	—
NS	7.51E+04	8.39E+04	7.54E+04	8.37E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–383. Time history of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
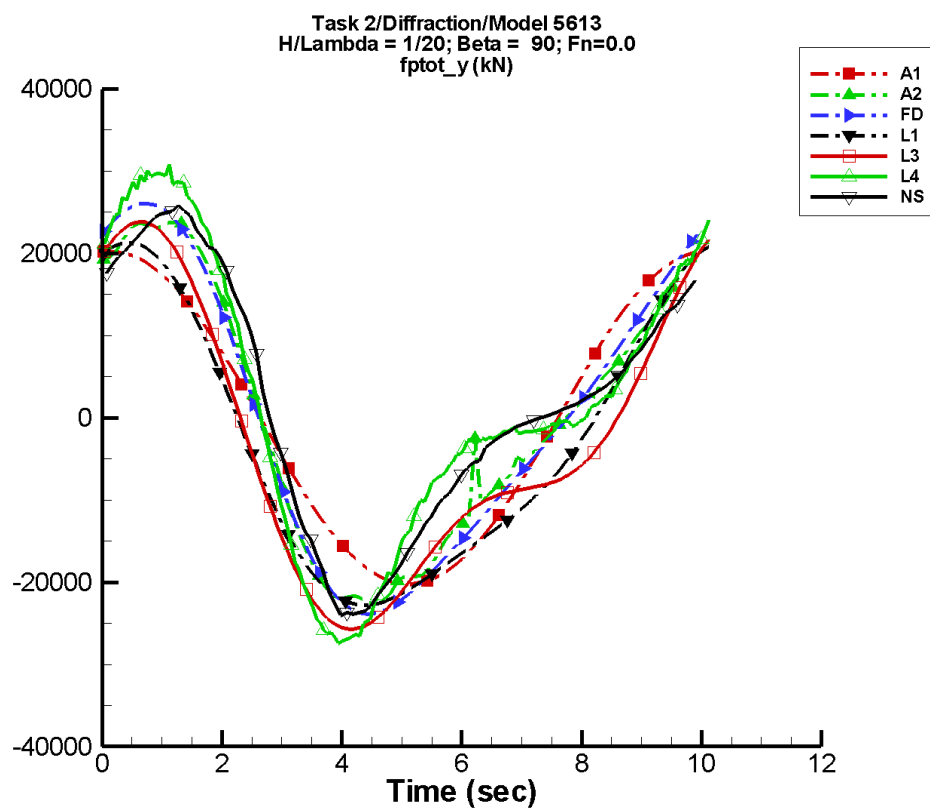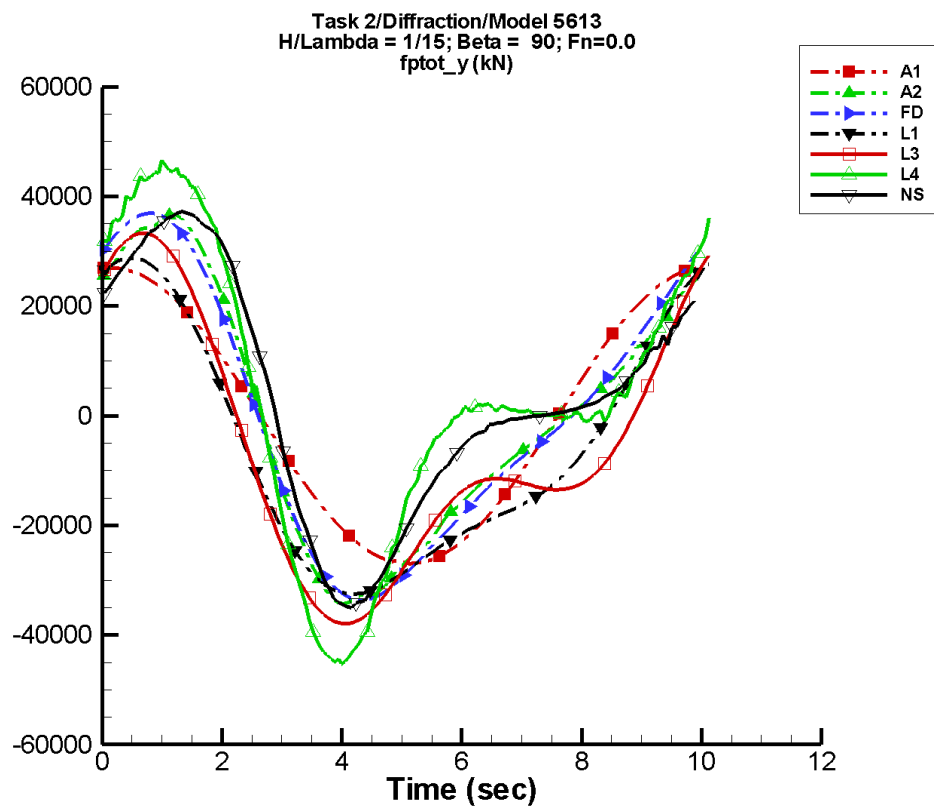
Table G–765. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	0.128	-148	9.66E-02	-176
A2	7.62E+04	5.83E+03	62	3.75E+03	-101
FD	7.62E+04	5.02E+03	53	3.20E+03	-101
L1	8.56E+04	0.395	-56	0.318	-6
L3	7.66E+04	5.09E+03	58	3.58E+03	-99
L4	7.66E+04	5.09E+03	58	3.58E+03	-99
NF	—	—	—	—	—
NS	7.46E+04	5.61E+03	29	3.35E+03	-107

Table G–766. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	6.42E+04	8.29E+04	6.42E+04	8.28E+04
FD	6.55E+04	8.24E+04	6.56E+04	8.24E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	6.58E+04	8.27E+04	6.58E+04	8.27E+04
L4	6.58E+04	8.27E+04	6.58E+04	8.27E+04
NF	—	—	—	—
NS	6.33E+04	8.31E+04	6.44E+04	8.30E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–384. Time history of F_z^{hst} for one period for $H/\lambda = 1/10, \lambda/L = 1, \beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
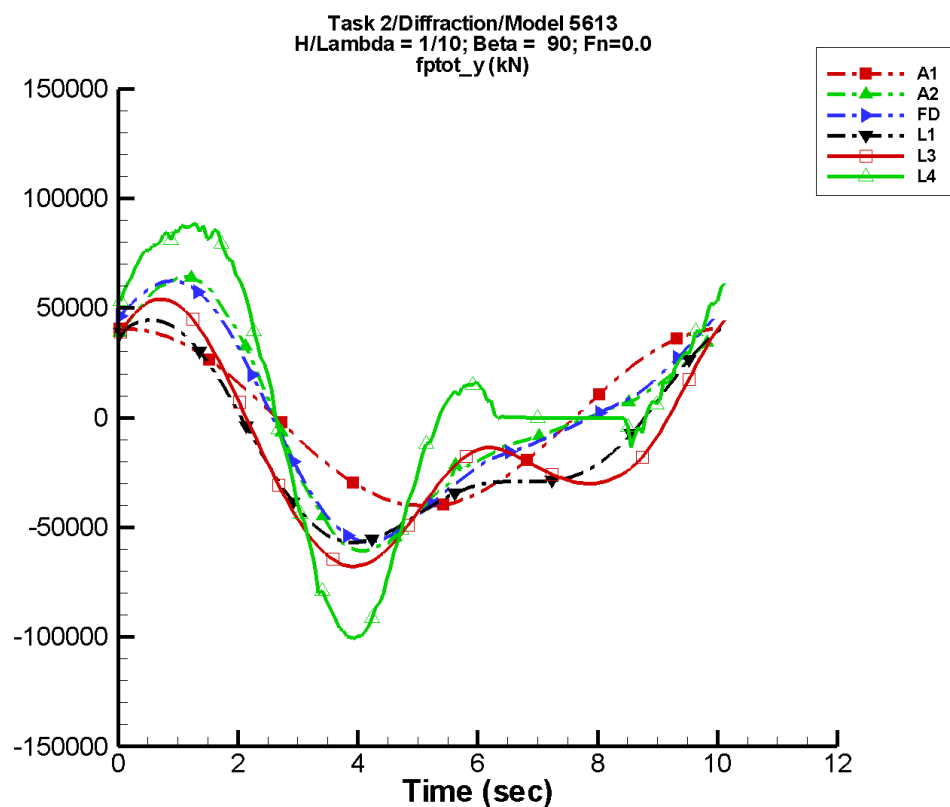
Table G–767. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	0.128	-148	9.66E-02	-176
A2	6.55E+04	1.43E+04	30	4.25E+03	142
FD	6.83E+04	1.26E+04	40	6.16E+03	-179
L1	8.56E+04	0.395	-56	0.318	-6
L3	6.84E+04	1.26E+04	40	5.91E+03	-178
L4	6.84E+04	1.26E+04	40	5.91E+03	-178
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–768. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	3.39E+04	7.81E+04	3.74E+04	7.80E+04
FD	5.01E+04	8.21E+04	5.04E+04	8.11E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	5.00E+04	8.14E+04	5.03E+04	8.13E+04
L4	5.00E+04	8.14E+04	5.03E+04	8.13E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–385. Time history of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
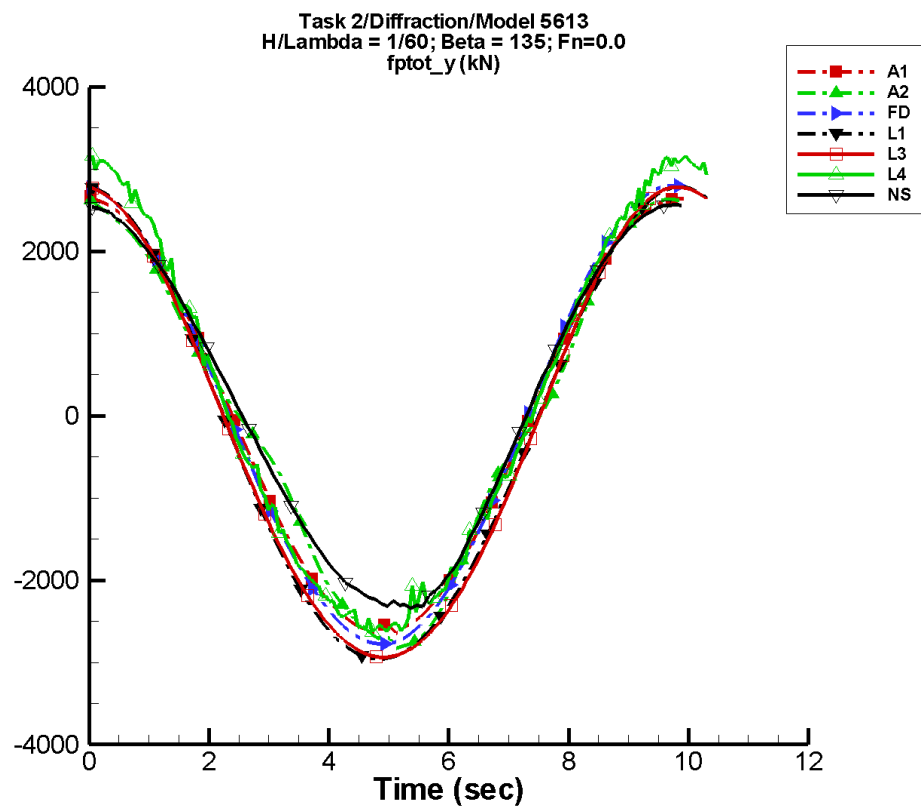
Table G–769. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} +$ $\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.81E-02	-34	2.64E-02	146
A2	8.50E+04	798.	159	592.	-18
FD	8.49E+04	480.	95	311.	-46
L1	8.56E+04	4.21E-02	36	4.82E-02	2
L3	8.51E+04	489.	92	304.	-52
L4	8.51E+04	489.	92	304.	-52
NF	—	—	—	—	—
NS	8.56E+04	117.	82	105.	-63

Table G–770. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

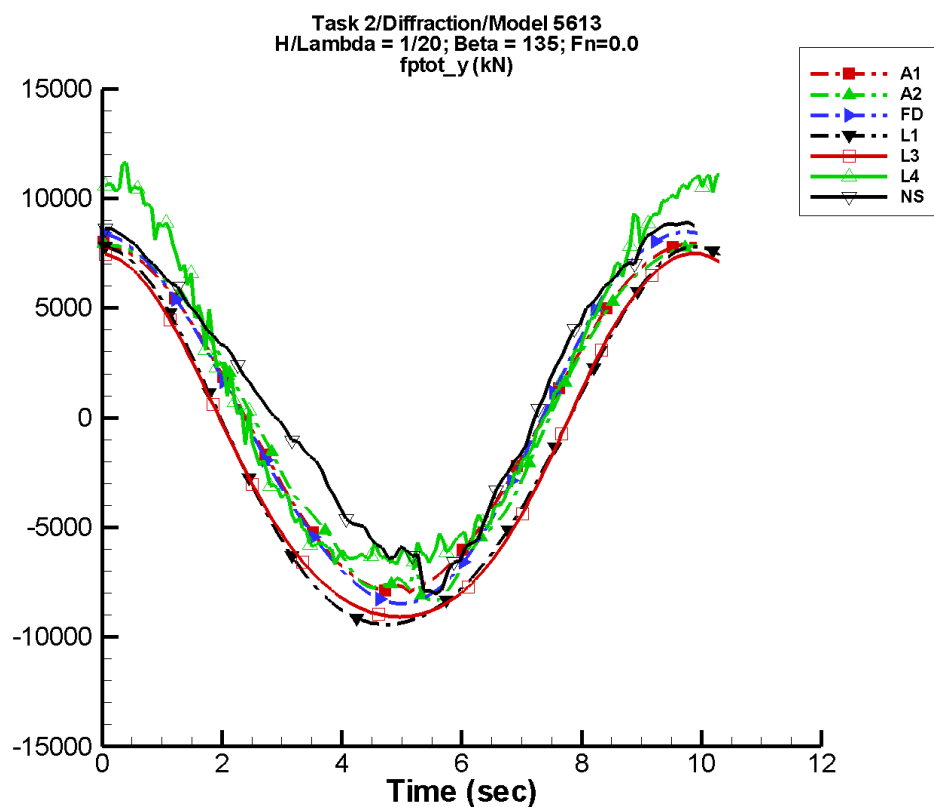| Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	8.37E+04	8.60E+04	8.37E+04	8.60E+04
FD	8.40E+04	8.54E+04	8.40E+04	8.53E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	8.43E+04	8.56E+04	8.43E+04	8.56E+04
L4	8.43E+04	8.56E+04	8.43E+04	8.56E+04
NF	—	—	—	—
NS	8.53E+04	8.58E+04	8.54E+04	8.58E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 45; Fn=0.3
fhst_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–386. Time history of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
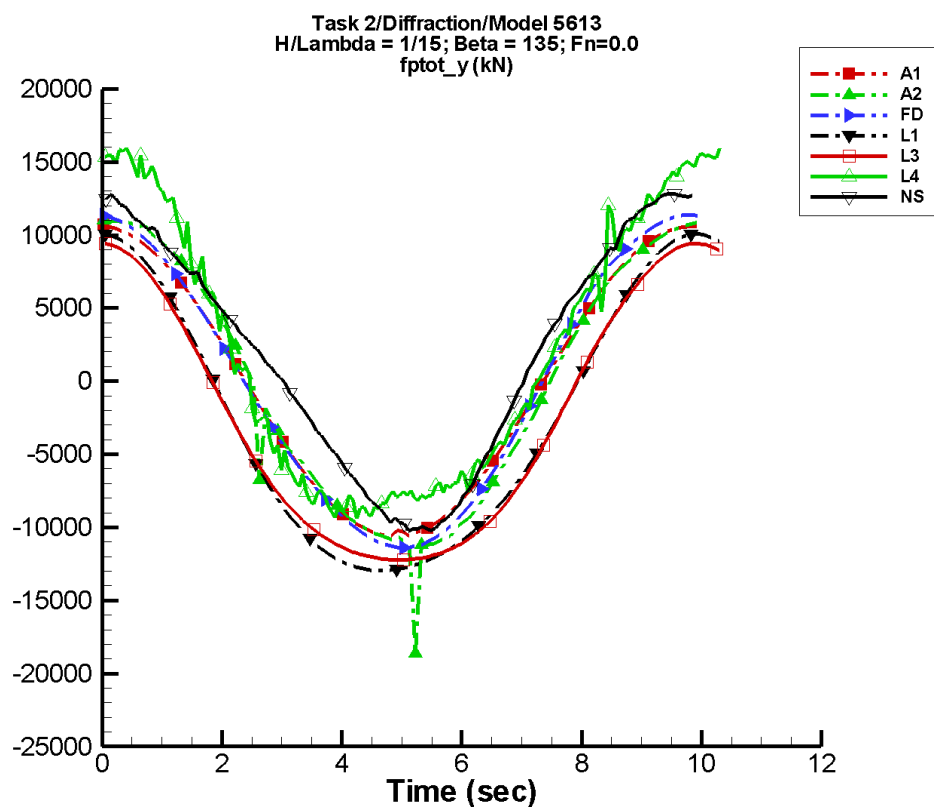
Table G–771. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.81E-02	-34	2.64E-02	146
A2	8.13E+04	4.61E+03	63	2.36E+03	-99
FD	8.15E+04	4.39E+03	56	1.81E+03	-94
L1	8.56E+04	4.21E-02	36	4.82E-02	2
L3	8.19E+04	4.41E+03	53	1.82E+03	-101
L4	8.19E+04	4.41E+03	53	1.82E+03	-101
NF	—	—	—	—	—
NS	8.36E+04	1.27E+03	51	919.	-96

Table G–772. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	7.29E+04	8.60E+04	7.31E+04	8.58E+04
FD	7.38E+04	8.61E+04	7.39E+04	8.61E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	7.41E+04	8.65E+04	7.42E+04	8.64E+04
L4	7.41E+04	8.65E+04	7.42E+04	8.64E+04
NF	—	—	—	—
NS	8.05E+04	8.52E+04	8.10E+04	8.52E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–387. Time history of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
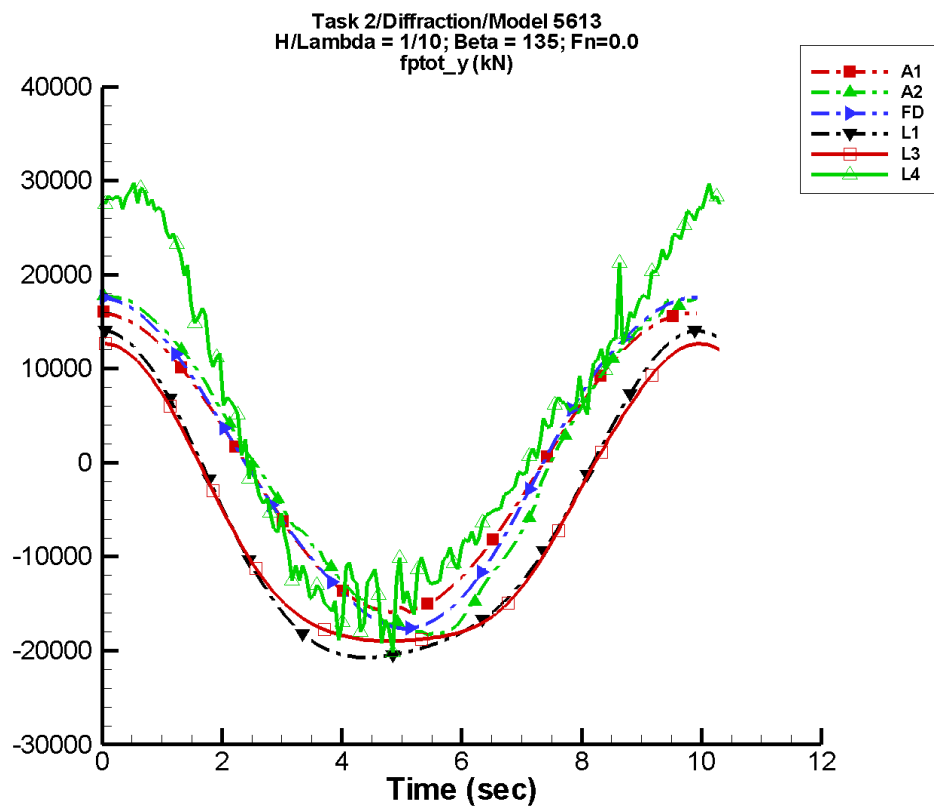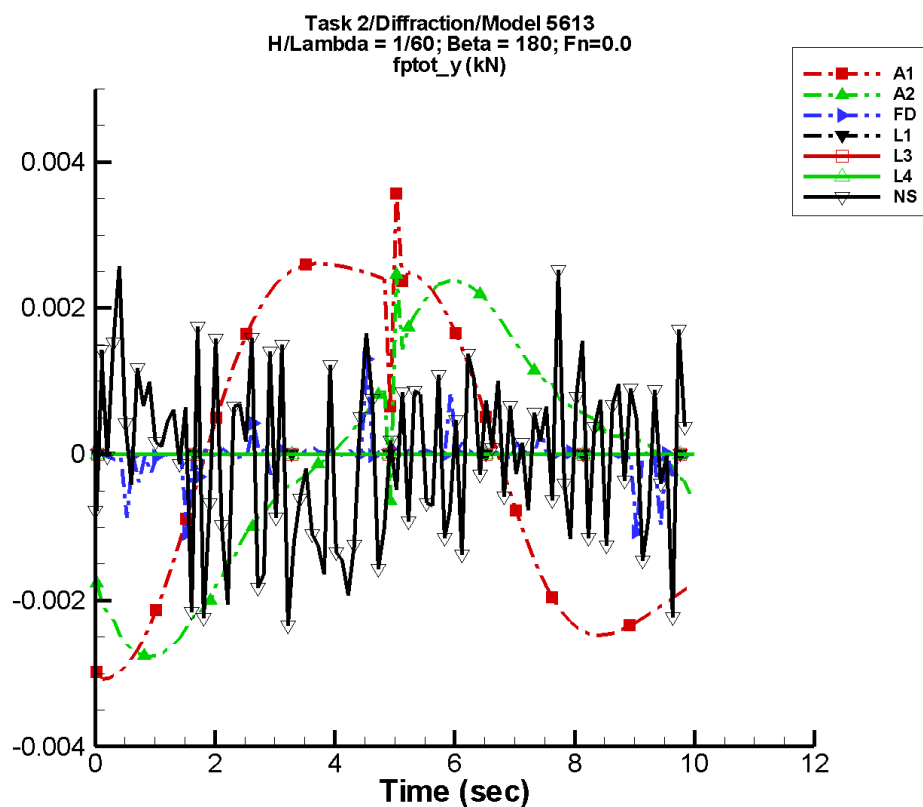
Table G–773. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.81E-02	-34	2.64E-02	146
A2	7.63E+04	1.20E+04	27	2.30E+03	-136
FD	7.61E+04	1.14E+04	30	1.56E+03	-139
L1	8.56E+04	4.21E-02	36	4.82E-02	2
L3	7.66E+04	1.15E+04	27	1.62E+03	-147
L4	7.66E+04	1.15E+04	27	1.62E+03	-147
NF	—	—	—	—	—
NS	8.21E+04	3.01E+03	45	1.89E+03	-111

Table G–774. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	5.69E+04	8.82E+04	5.78E+04	8.80E+04
FD	5.75E+04	8.73E+04	5.83E+04	8.73E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	5.76E+04	8.78E+04	5.80E+04	8.78E+04
L4	5.76E+04	8.78E+04	5.80E+04	8.78E+04
NF	—	—	—	—
NS	7.52E+04	8.55E+04	7.55E+04	8.56E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–388. Time history of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–775. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
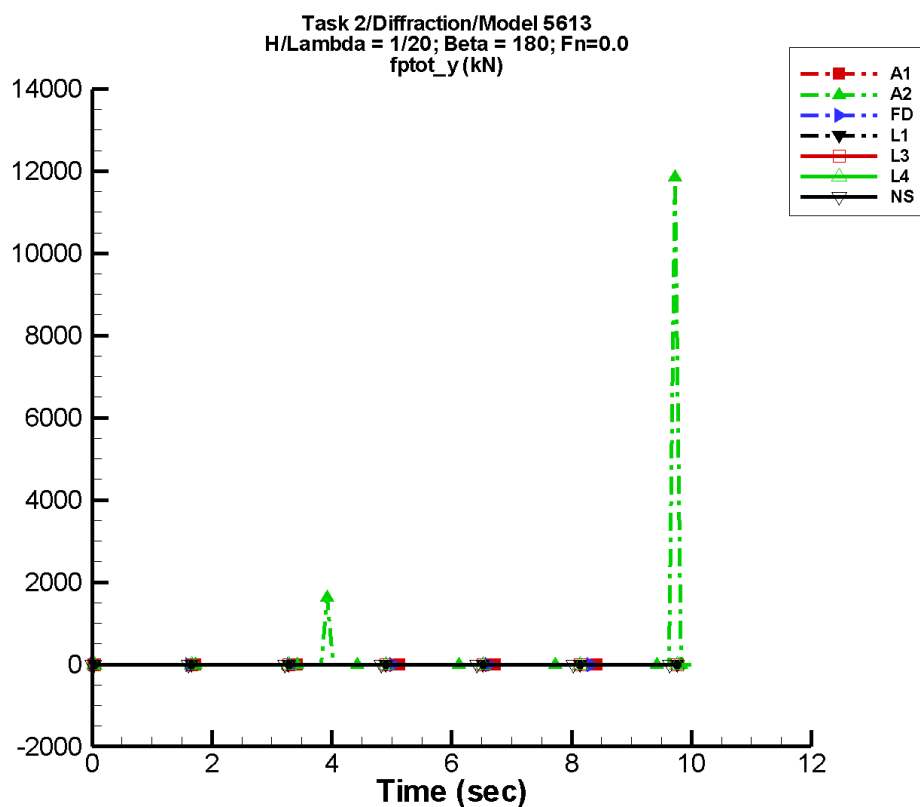
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.81E-02	-34	2.64E-02	146
A2	6.74E+04	3.01E+04	22	1.14E+04	93
FD	6.86E+04	3.02E+04	26	1.04E+04	110
L1	8.56E+04	4.21E-02	36	4.82E-02	2
L3	6.86E+04	3.00E+04	22	1.03E+04	103
L4	6.86E+04	3.00E+04	22	1.03E+04	103
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–776. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	2.59E+04	1.00E+05	2.99E+04	9.95E+04
FD	3.07E+04	9.88E+04	3.08E+04	9.83E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	3.04E+04	9.93E+04	3.09E+04	9.83E+04
L4	3.04E+04	9.93E+04	3.09E+04	9.83E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–389. Time history of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
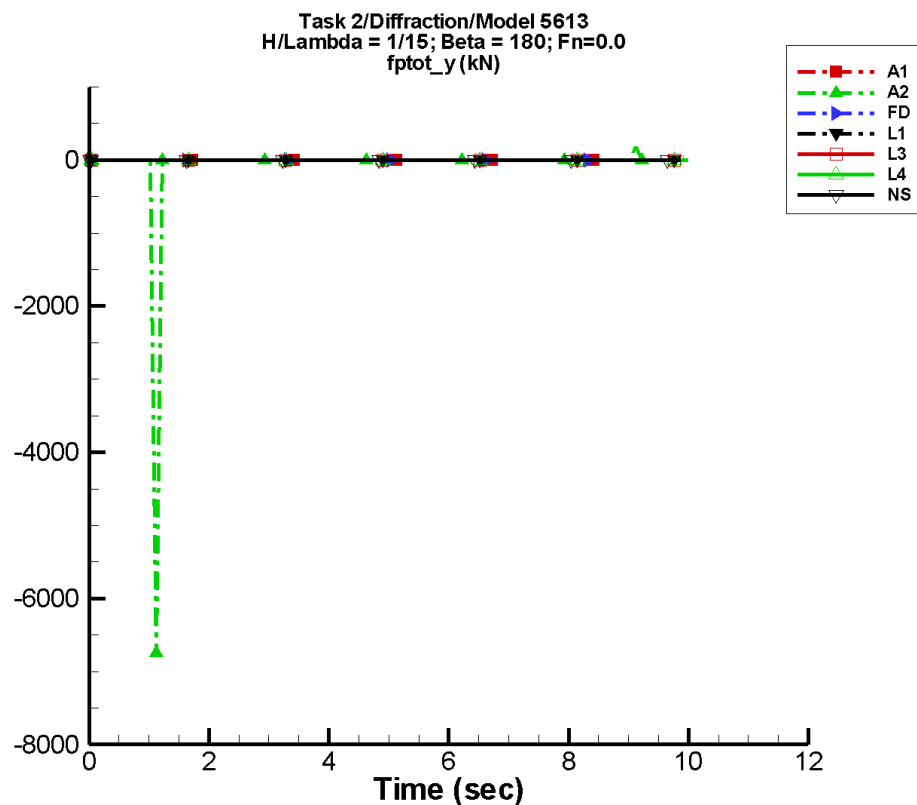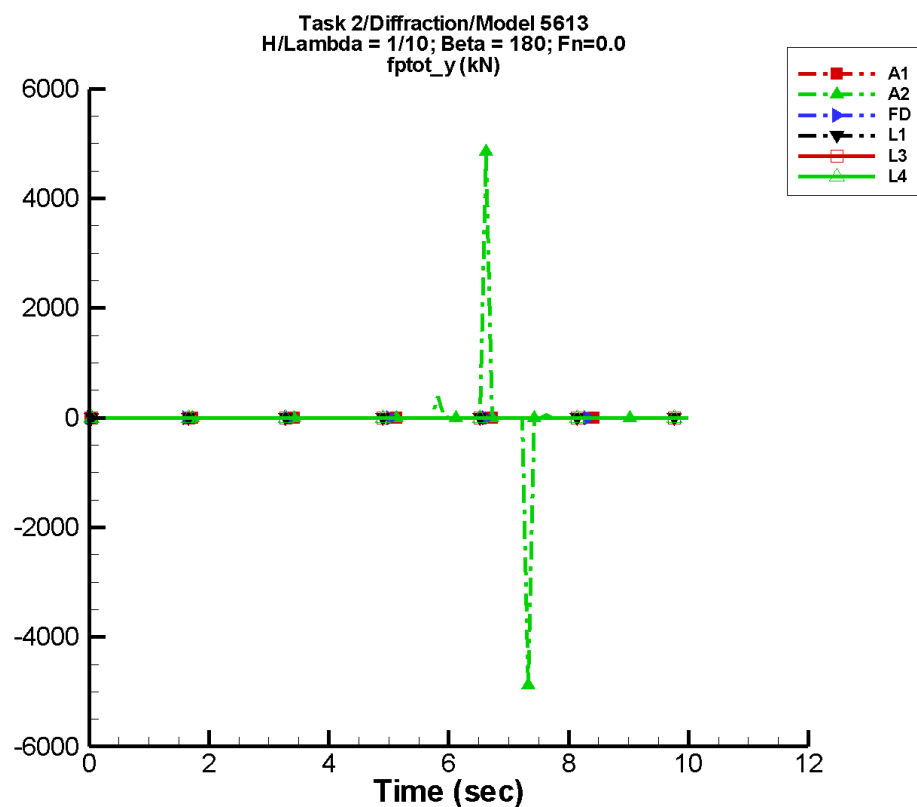
Table G–777. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	8.50E+04	701.	-8	647.	73
FD	8.49E+04	1.03E+03	-9	338.	72
L1	8.56E+04	2.40E-02	-144	1.75E-02	165
L3	8.51E+04	1.04E+03	-5	316.	85
L4	8.51E+04	1.04E+03	-5	316.	85
NF	—	—	—	—	—
NS	8.47E+04	382.	-5	81.8	86

Table G–778. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	8.39E+04	8.57E+04	8.39E+04	8.57E+04
FD	8.34E+04	8.57E+04	8.34E+04	8.57E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	8.36E+04	8.60E+04	8.36E+04	8.60E+04
L4	8.36E+04	8.60E+04	8.36E+04	8.60E+04
NF	—	—	—	—
NS	8.42E+04	8.50E+04	8.42E+04	8.50E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–390. Time history of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
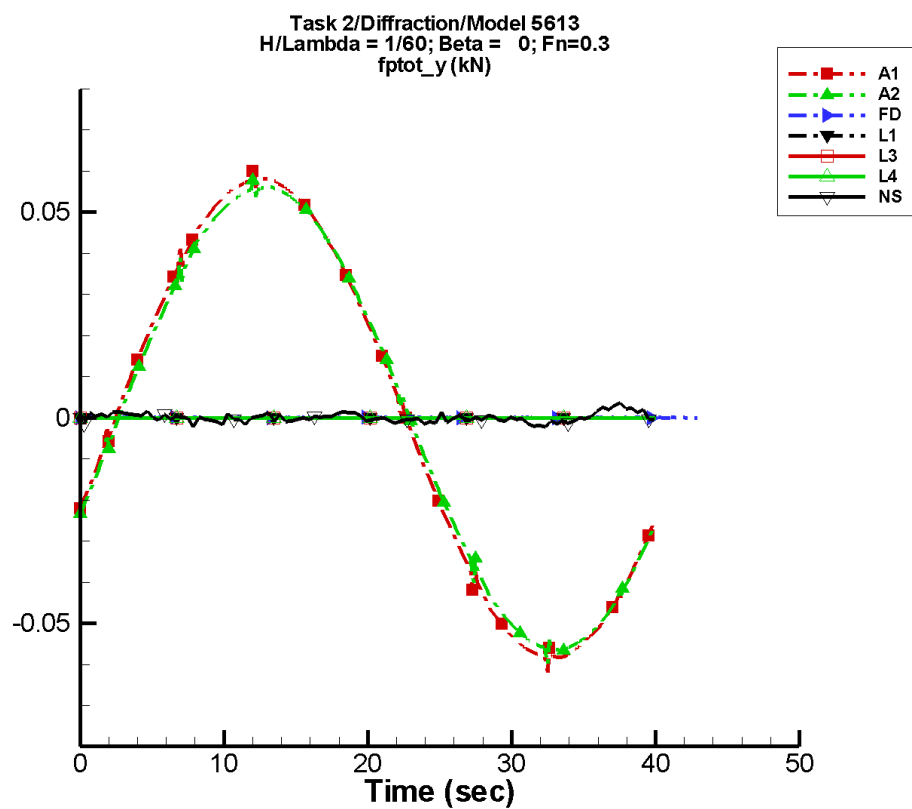
Table G–779. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	8.12E+04	9.18E+03	-10	3.44E+03	76
FD	8.14E+04	9.74E+03	-9	3.45E+03	71
L1	8.56E+04	2.40E-02	-144	1.75E-02	165
L3	8.19E+04	9.71E+03	-5	3.15E+03	85
L4	8.19E+04	9.71E+03	-5	3.15E+03	85
NF	—	—	—	—	—
NS	8.20E+04	6.99E+03	-6	2.68E+03	82

Table G–780. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

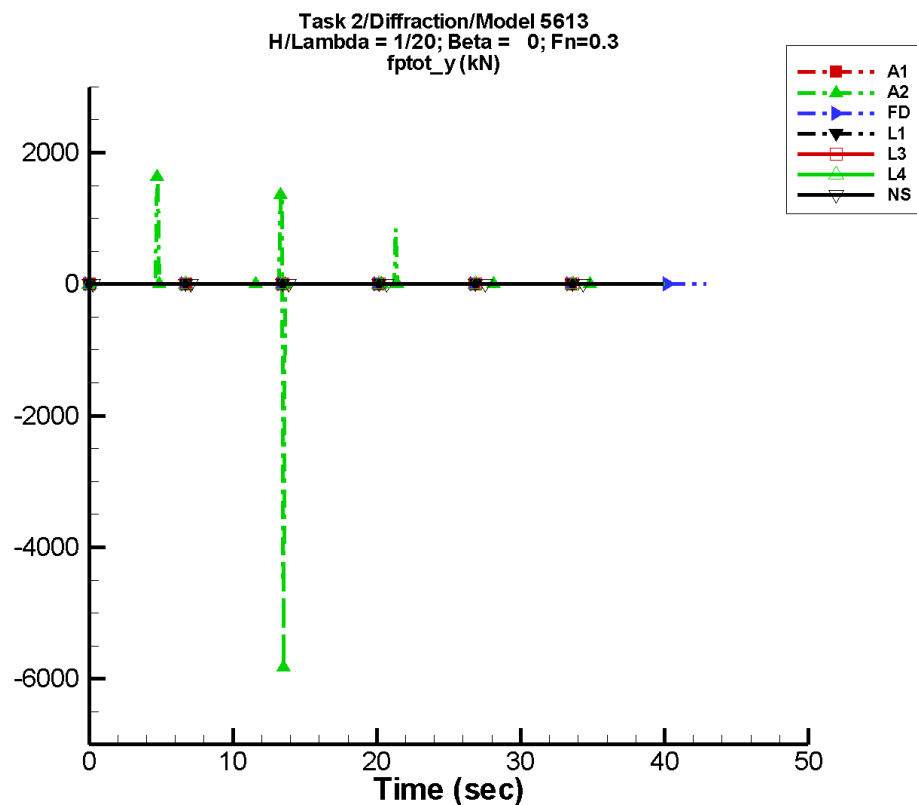| Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	6.58E+04	8.92E+04	6.67E+04	8.91E+04
FD	6.63E+04	8.90E+04	6.66E+04	8.90E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	6.70E+04	8.95E+04	6.71E+04	8.95E+04
L4	6.70E+04	8.95E+04	6.71E+04	8.95E+04
NF	—	—	—	—
NS	7.00E+04	8.74E+04	7.08E+04	8.74E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–391. Time history of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
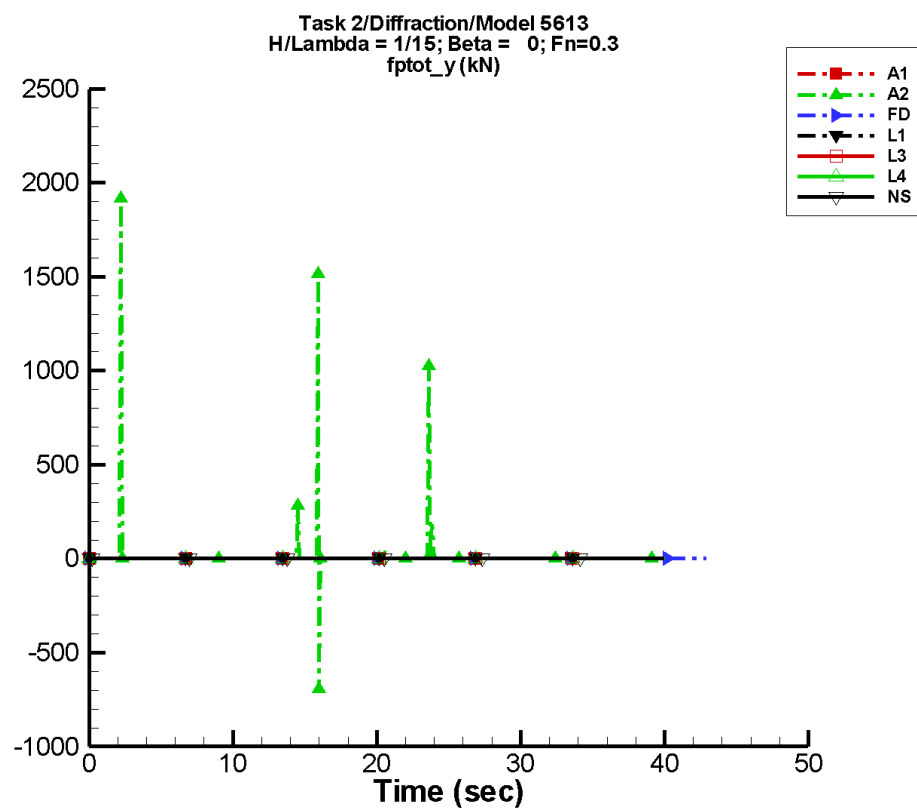
Table G–781. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	7.59E+04	2.23E+04	-10	9.25E+03	76
FD	7.56E+04	2.22E+04	-10	9.81E+03	69
L1	8.56E+04	2.40E-02	-144	1.75E-02	165
L3	7.65E+04	2.21E+04	-6	9.02E+03	85
L4	7.65E+04	2.21E+04	-6	9.02E+03	85
NF	—	—	—	—	—
NS	7.67E+04	1.45E+04	-5	6.54E+03	84

Table G–782. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	3.26E+04	9.39E+04	3.58E+04	9.35E+04
FD	3.33E+04	9.20E+04	3.57E+04	9.18E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	3.37E+04	9.26E+04	3.50E+04	9.26E+04
L4	3.37E+04	9.26E+04	3.50E+04	9.26E+04
NF	—	—	—	—
NS	4.86E+04	8.73E+04	4.96E+04	8.73E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–392. Time history of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
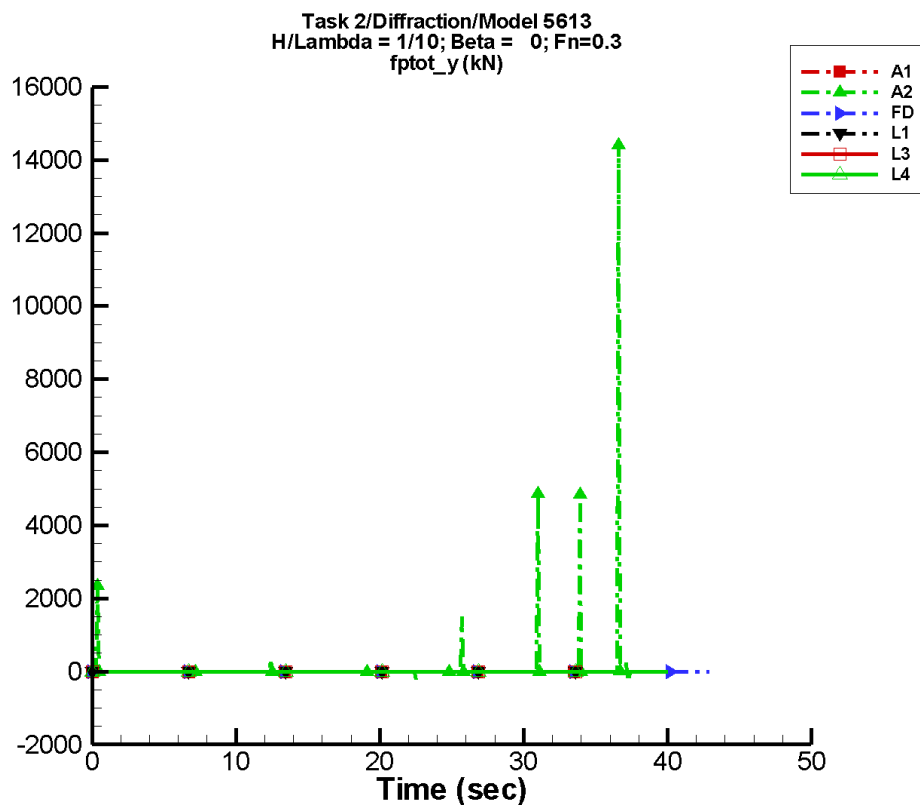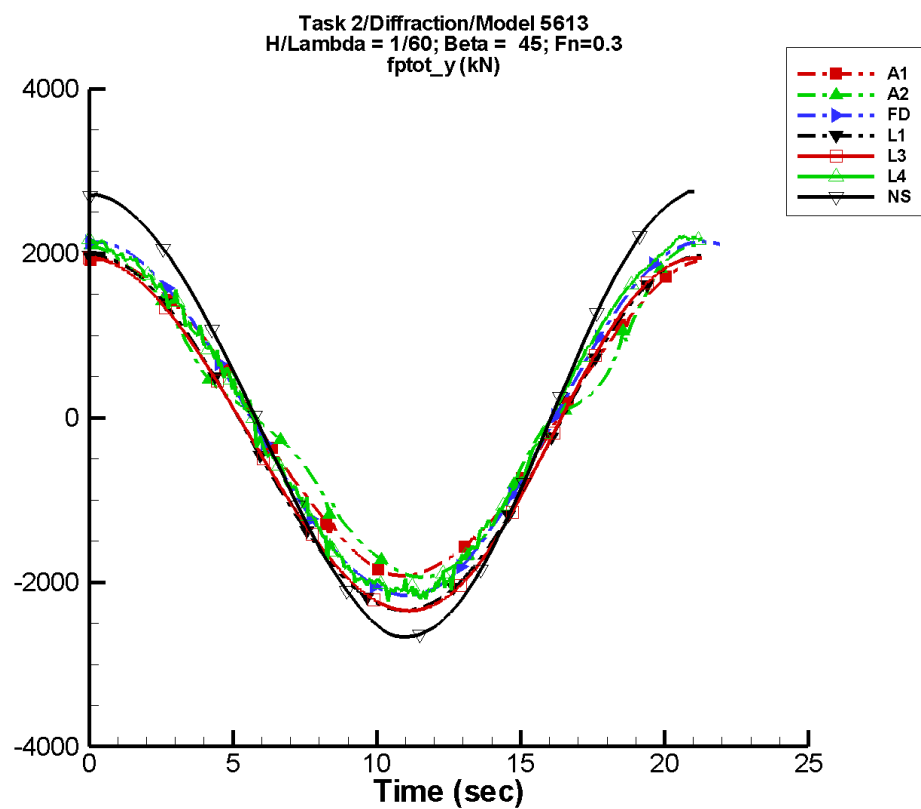
Table G–783. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.36E-02	144	4.45E-03	-90
A2	6.71E+04	5.70E+04	-9	1.18E+04	82
FD	6.79E+04	5.79E+04	-9	1.02E+04	71
L1	8.56E+04	2.40E-02	-144	1.75E-02	165
L3	6.88E+04	5.88E+04	-6	9.46E+03	94
L4	6.88E+04	5.88E+04	-6	9.46E+03	94
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–784. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	-660.	1.32E+05	-1.04E+03	1.30E+05
FD	-0.00	1.34E+05	-437.	1.32E+05
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	0.00	1.33E+05	-90.3	1.34E+05
L4	0.00	1.33E+05	-90.3	1.34E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–393. Time history of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
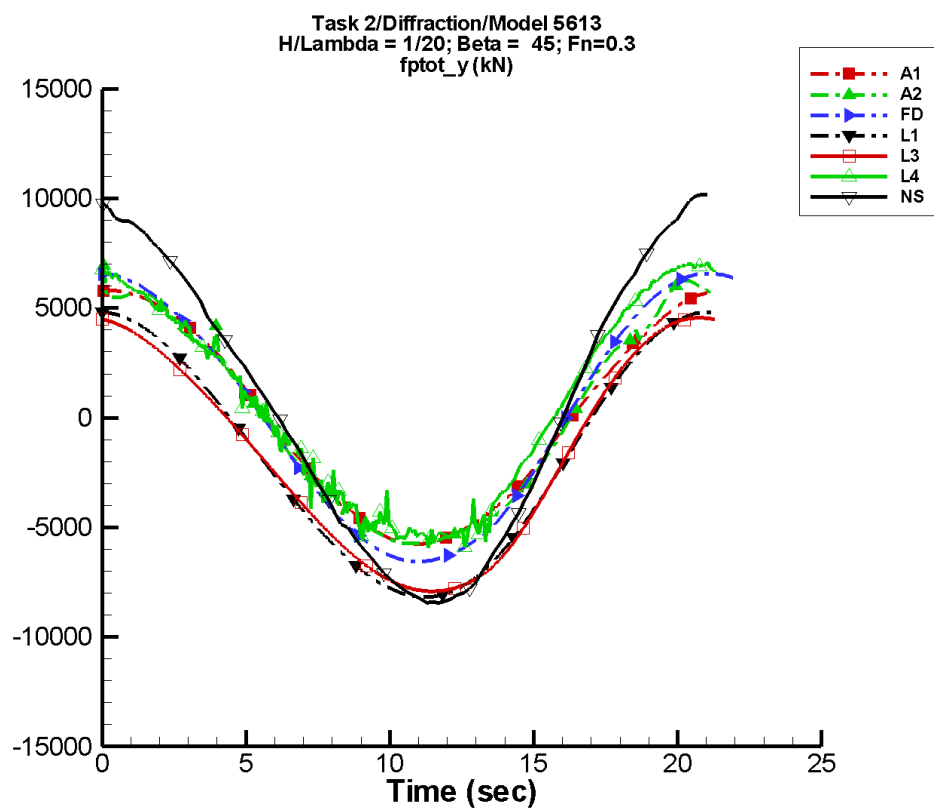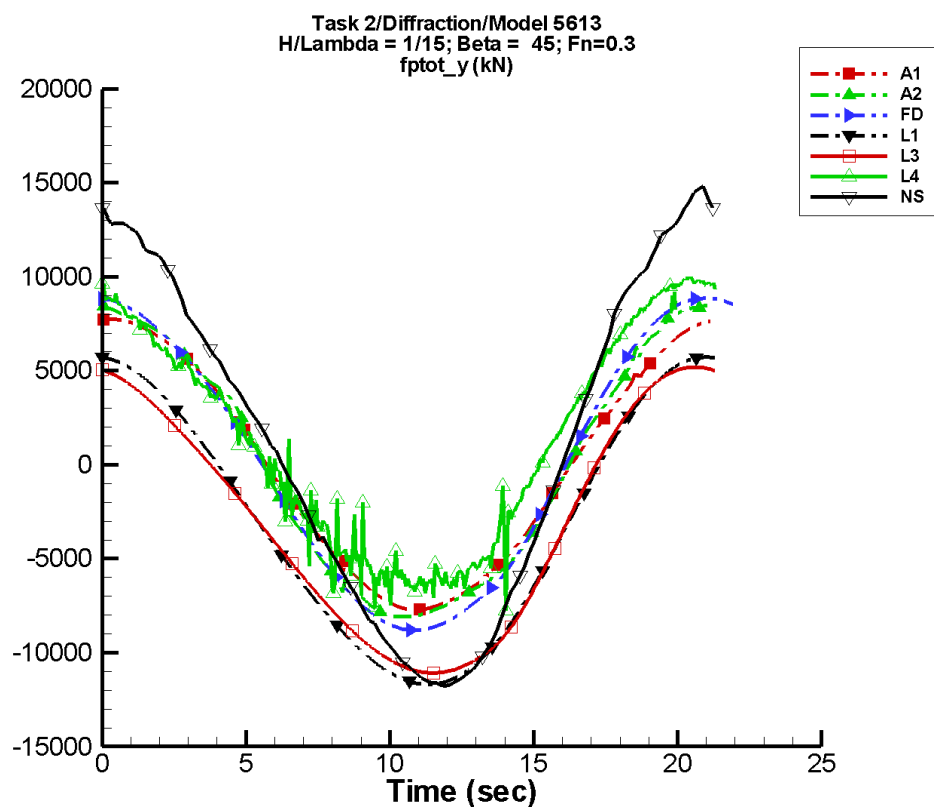
Table G–785. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.45E-02	26	8.88E-03	153
A2	8.50E+04	819.	-170	562.	177
FD	8.49E+04	491.	-88	322.	-122
L1	8.56E+04	4.55E-02	-173	4.27E-03	110
L3	8.51E+04	494.	-94	313.	-132
L4	8.51E+04	494.	-94	313.	-132
NF	—	—	—	—	—
NS	8.47E+04	174.	-17	75.4	-110

Table G–786. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	8.37E+04	8.60E+04	8.38E+04	8.60E+04
FD	8.40E+04	8.54E+04	8.40E+04	8.53E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	8.43E+04	8.56E+04	8.43E+04	8.56E+04
L4	8.43E+04	8.56E+04	8.43E+04	8.56E+04
NF	—	—	—	—
NS	8.45E+04	8.49E+04	8.45E+04	8.49E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–394. Time history of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
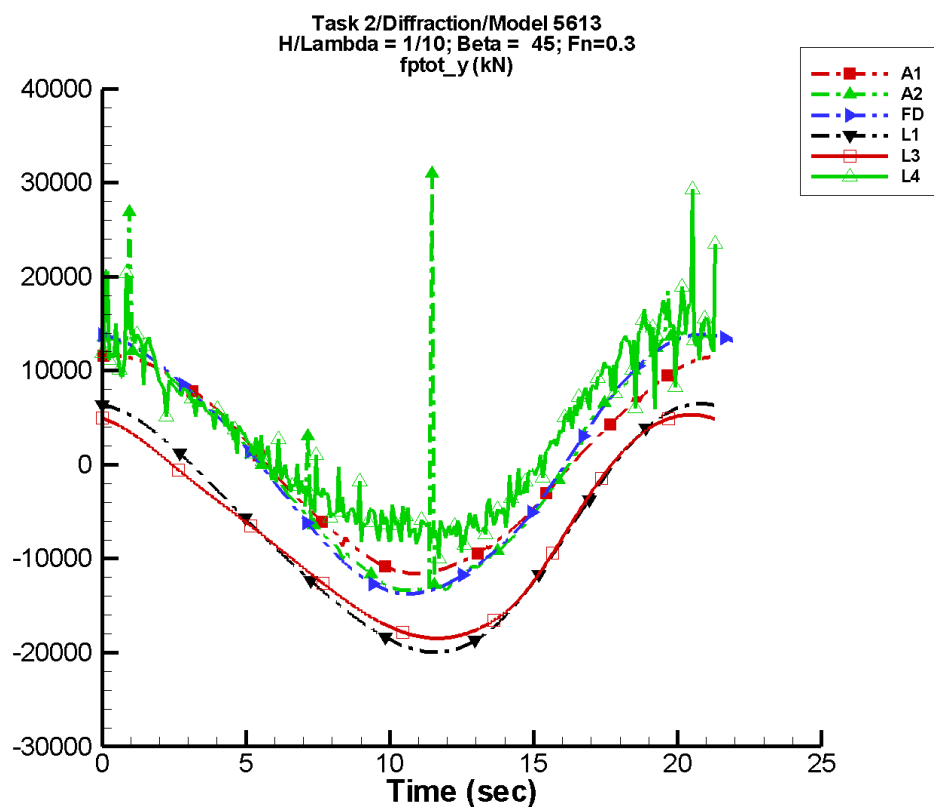
Table G–787. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.45E-02	26	8.88E-03	153
A2	8.13E+04	4.46E+03	-70	2.36E+03	-97
FD	8.16E+04	4.31E+03	-47	1.87E+03	-70
L1	8.56E+04	4.55E-02	-173	4.27E-03	110
L3	8.19E+04	4.28E+03	-54	1.80E+03	-80
L4	8.19E+04	4.28E+03	-54	1.80E+03	-80
NF	—	—	—	—	—
NS	8.16E+04	3.78E+03	-43	1.92E+03	-81

Table G–788. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	7.30E+04	8.59E+04	7.38E+04	8.57E+04
FD	7.38E+04	8.61E+04	7.48E+04	8.60E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	7.42E+04	8.65E+04	7.44E+04	8.64E+04
L4	7.42E+04	8.65E+04	7.44E+04	8.64E+04
NF	—	—	—	—
NS	7.45E+04	8.59E+04	7.50E+04	8.59E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–395. Time history of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
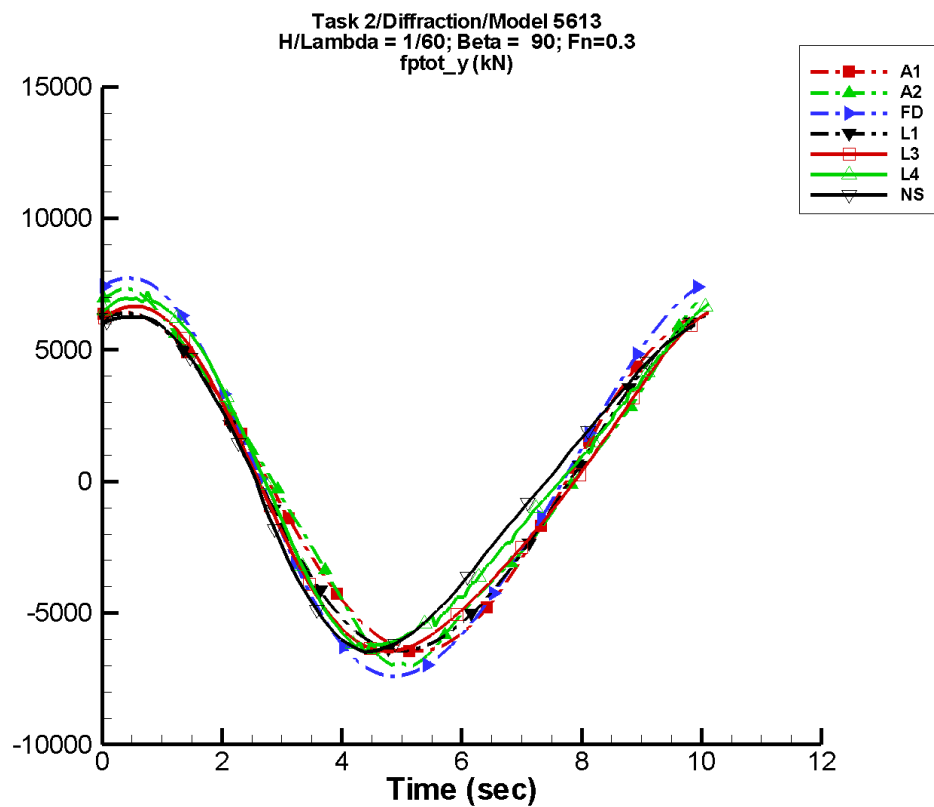
Table G–789. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.45E-02	26	8.88E-03	153
A2	7.62E+04	1.16E+04	-35	2.23E+03	-55
FD	7.62E+04	1.13E+04	-22	1.78E+03	-22
L1	8.56E+04	4.55E-02	-173	4.27E-03	110
L3	7.66E+04	1.14E+04	-28	1.61E+03	-30
L4	7.66E+04	1.14E+04	-28	1.61E+03	-30
NF	—	—	—	—	—
NS	7.51E+04	1.03E+04	-15	1.86E+03	-34

Table G–790. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
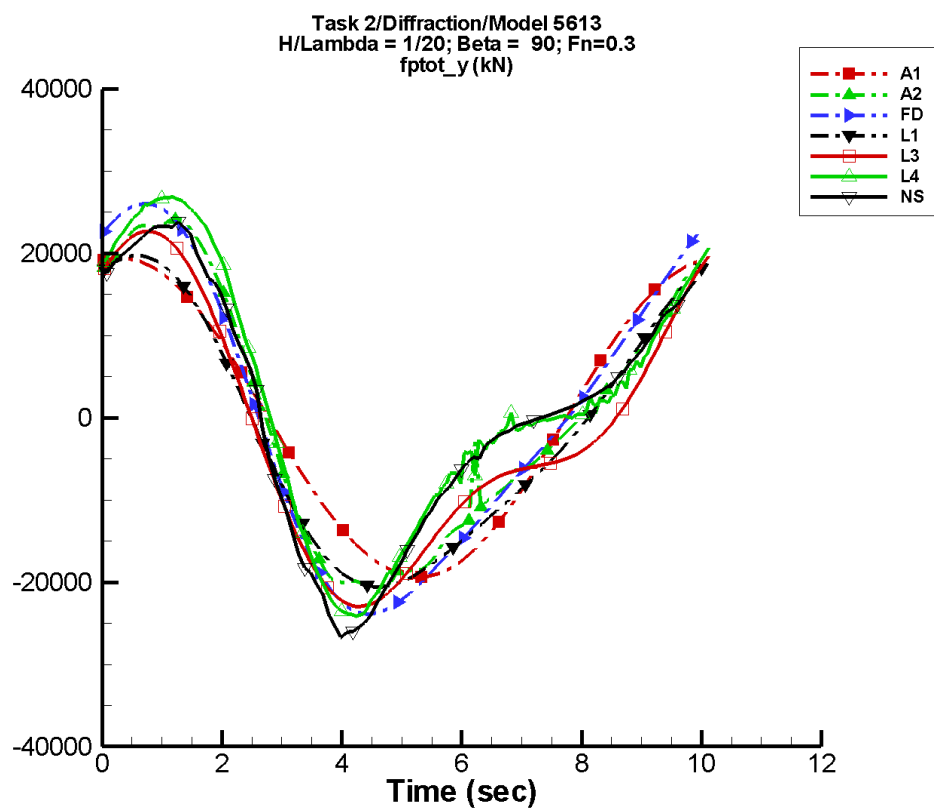
Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	5.70E+04	8.81E+04	6.12E+04	8.77E+04
FD	5.75E+04	8.73E+04	6.16E+04	8.70E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	5.78E+04	8.78E+04	6.00E+04	8.76E+04
L4	5.78E+04	8.78E+04	6.00E+04	8.76E+04
NF	—	—	—	—
NS	5.90E+04	8.50E+04	6.06E+04	8.50E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–396. Time history of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
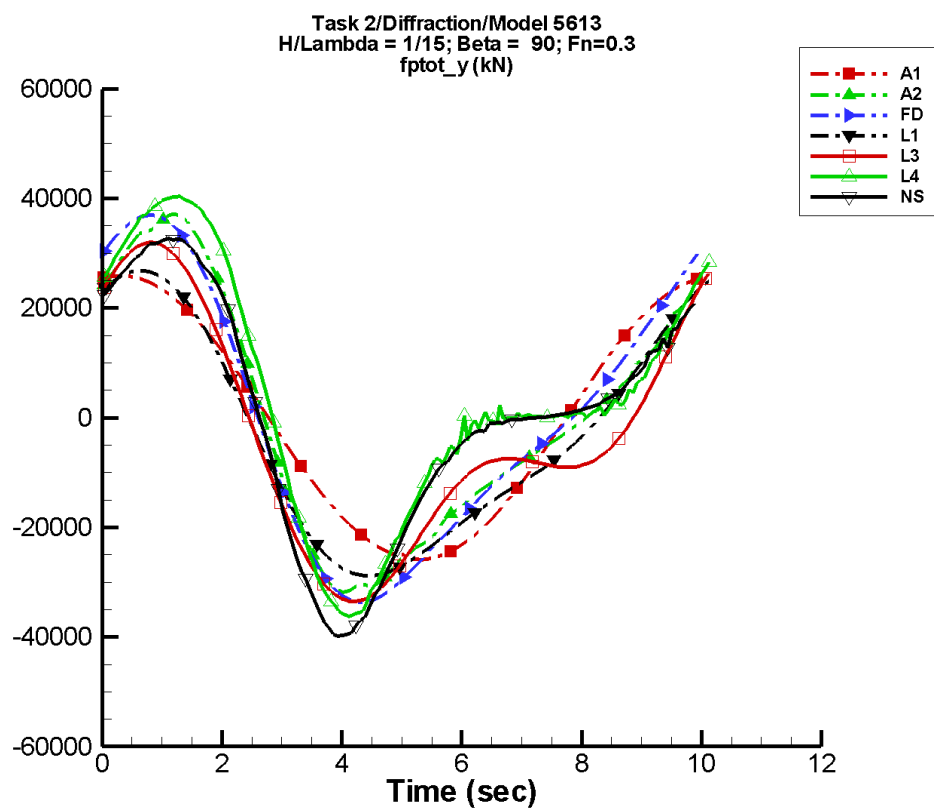
Table G–791. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.45E-02	26	8.88E-03	153
A2	6.77E+04	3.08E+04	-31	1.06E+04	72
FD	6.84E+04	3.04E+04	-20	9.85E+03	87
L1	8.56E+04	4.55E-02	-173	4.27E-03	110
L3	6.84E+04	3.01E+04	-24	9.58E+03	73
L4	6.84E+04	3.01E+04	-24	9.58E+03	73
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–792. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(kN)	(kN)	(kN)	(kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	2.70E+04	9.98E+04	3.10E+04	9.67E+04
FD	3.07E+04	9.86E+04	3.22E+04	9.58E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	3.03E+04	9.92E+04	3.14E+04	9.73E+04
L4	3.03E+04	9.92E+04	3.14E+04	9.73E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–397. Time history of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
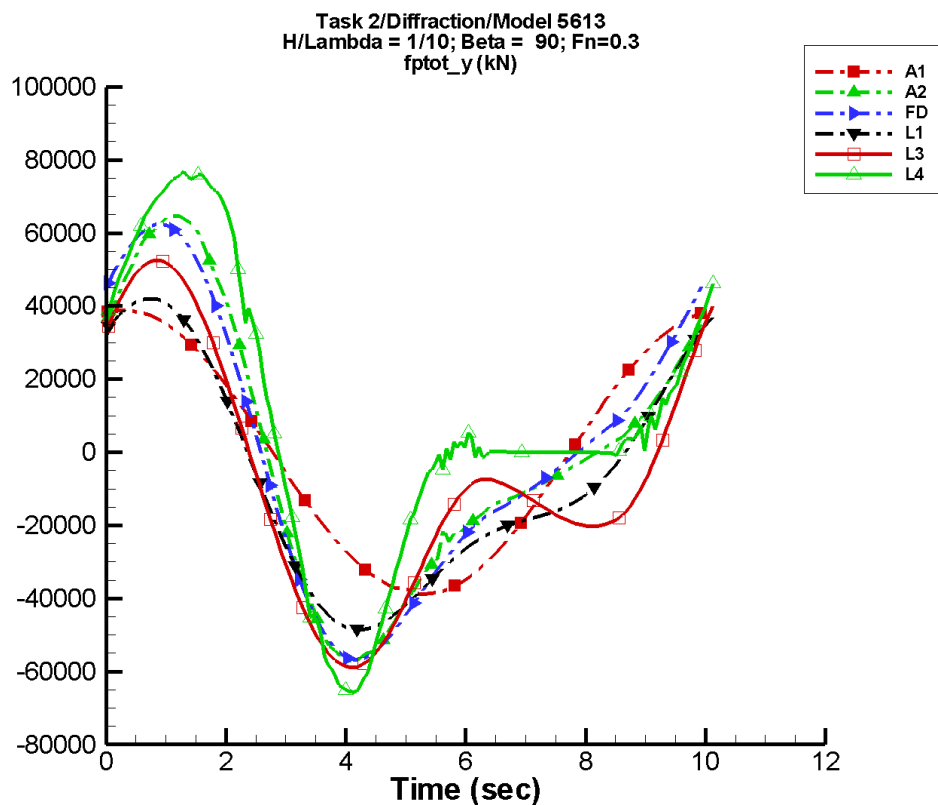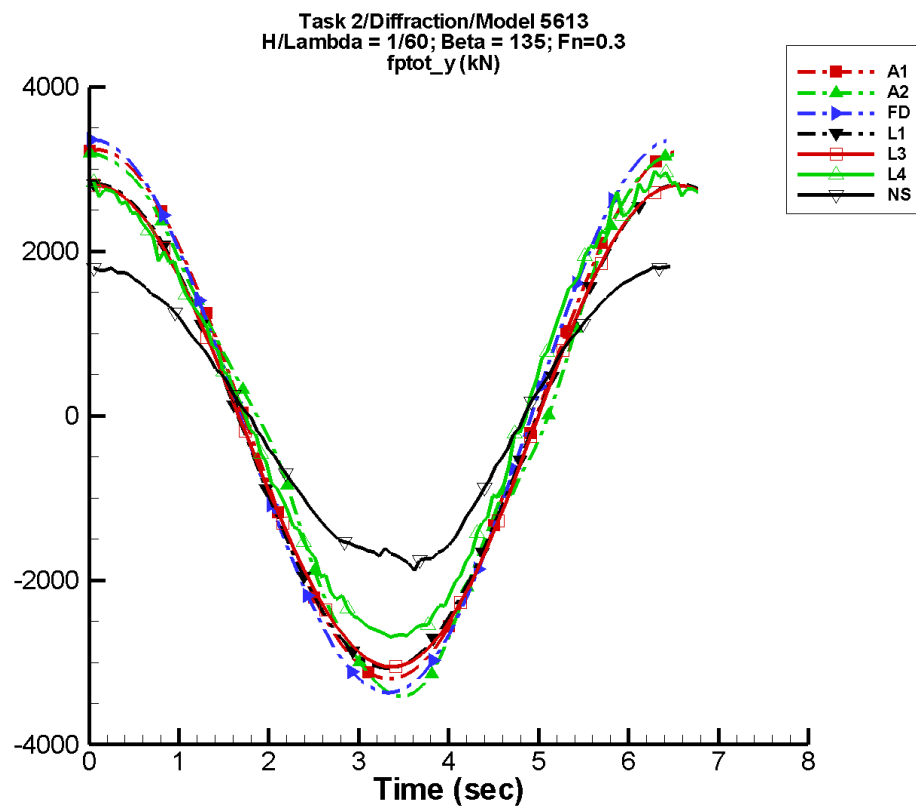
Table G–793. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$,
$F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.42E-02	168	5.18E-03	-165
A2	8.50E+04	1.51E+03	168	601.	137
FD	8.49E+04	522.	166	282.	77
L1	8.56E+04	1.15E-02	73	1.02E-02	105
L3	8.51E+04	534.	-172	266.	120
L4	8.51E+04	534.	-172	266.	120
NF	—	—	—	—	—
NS	8.47E+04	42.0	-125	79.1	-161

Table G–794. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/60$,
$\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	8.32E+04	8.68E+04	8.32E+04	8.66E+04
FD	8.40E+04	8.52E+04	8.41E+04	8.52E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	8.43E+04	8.55E+04	8.43E+04	8.55E+04
L4	8.43E+04	8.55E+04	8.43E+04	8.55E+04
NF	—	—	—	—
NS	8.45E+04	8.48E+04	8.45E+04	8.48E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–398. Time history of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–795. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
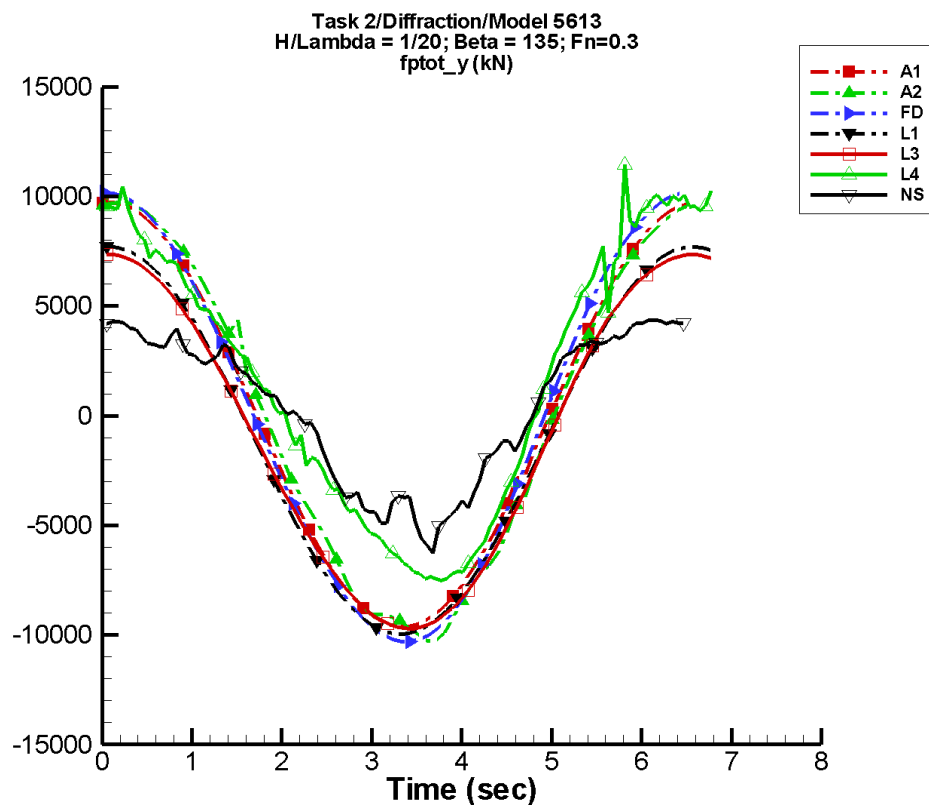
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.42E-02	168	5.18E-03	-165
A2	8.12E+04	4.22E+03	-134	2.51E+03	-147
FD	8.14E+04	3.09E+03	-150	2.13E+03	161
L1	8.56E+04	1.15E-02	73	1.02E-02	105
L3	8.19E+04	3.07E+03	-131	1.93E+03	-156
L4	8.19E+04	3.07E+03	-131	1.93E+03	-156
NF	—	—	—	—	—
NS	8.14E+04	2.54E+03	-103	2.17E+03	-130

Table G–796. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	7.30E+04	8.48E+04	7.31E+04	8.45E+04
FD	7.47E+04	8.35E+04	7.50E+04	8.35E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	7.49E+04	8.40E+04	7.50E+04	8.40E+04
L4	7.49E+04	8.40E+04	7.50E+04	8.40E+04
NF	—	—	—	—
NS	7.51E+04	8.39E+04	7.51E+04	8.37E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–399. Time history of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
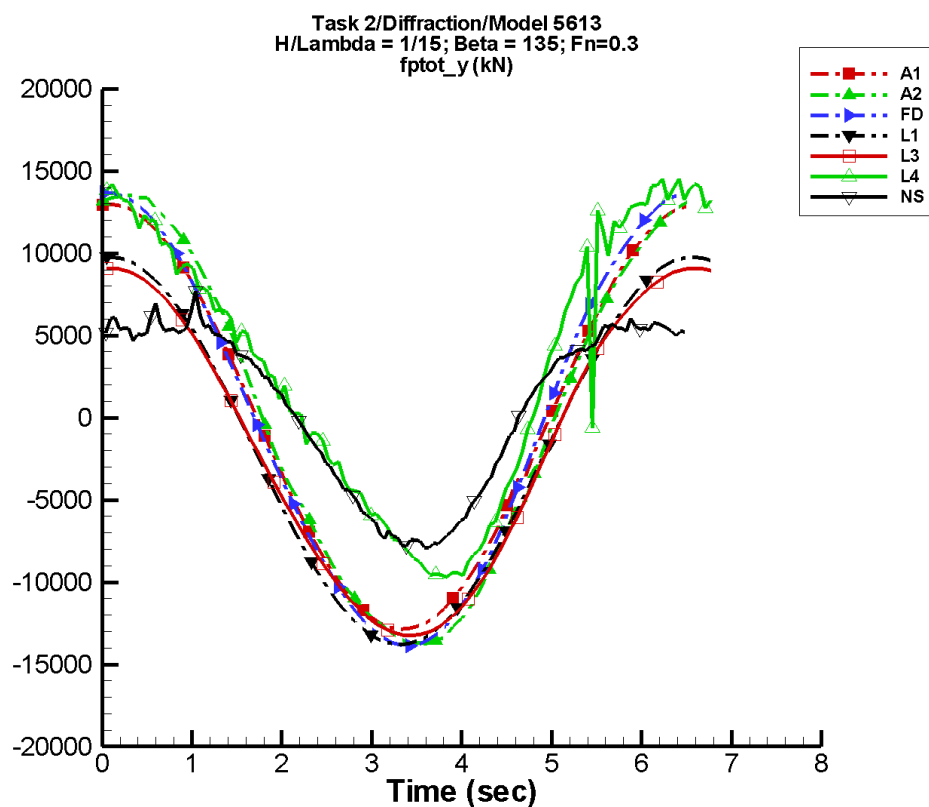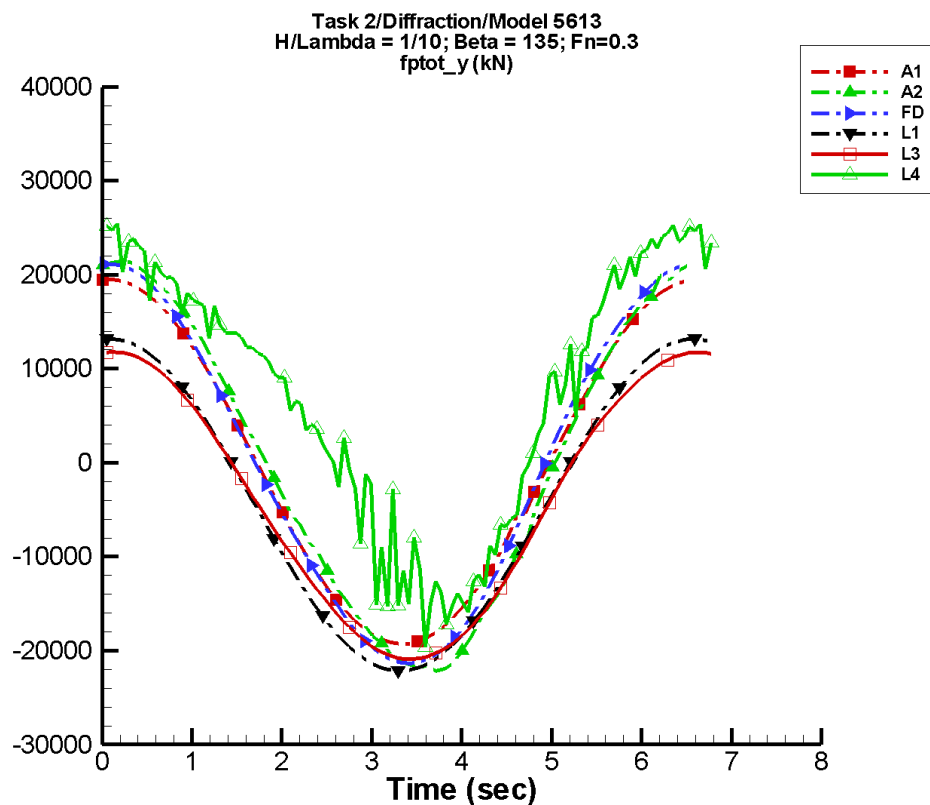
Table G–797. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of F_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$,
$F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.42E-02	168	5.18E-03	-165
A2	7.62E+04	5.75E+03	-76	3.82E+03	-108
FD	7.62E+04	5.04E+03	-91	3.36E+03	-157
L1	8.56E+04	1.15E-02	73	1.02E-02	105
L3	7.67E+04	4.84E+03	-72	3.24E+03	-118
L4	7.67E+04	4.84E+03	-72	3.24E+03	-118
NF	—	—	—	—	—
NS	7.47E+04	5.55E+03	-34	3.30E+03	-86

Table G–798. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/15$,
$\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	6.42E+04	8.28E+04	6.62E+04	8.26E+04
FD	6.56E+04	8.24E+04	6.76E+04	8.18E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	6.58E+04	8.27E+04	6.65E+04	8.25E+04
L4	6.58E+04	8.27E+04	6.65E+04	8.25E+04
NF	—	—	—	—
NS	6.33E+04	8.31E+04	6.44E+04	8.28E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–400. Time history of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
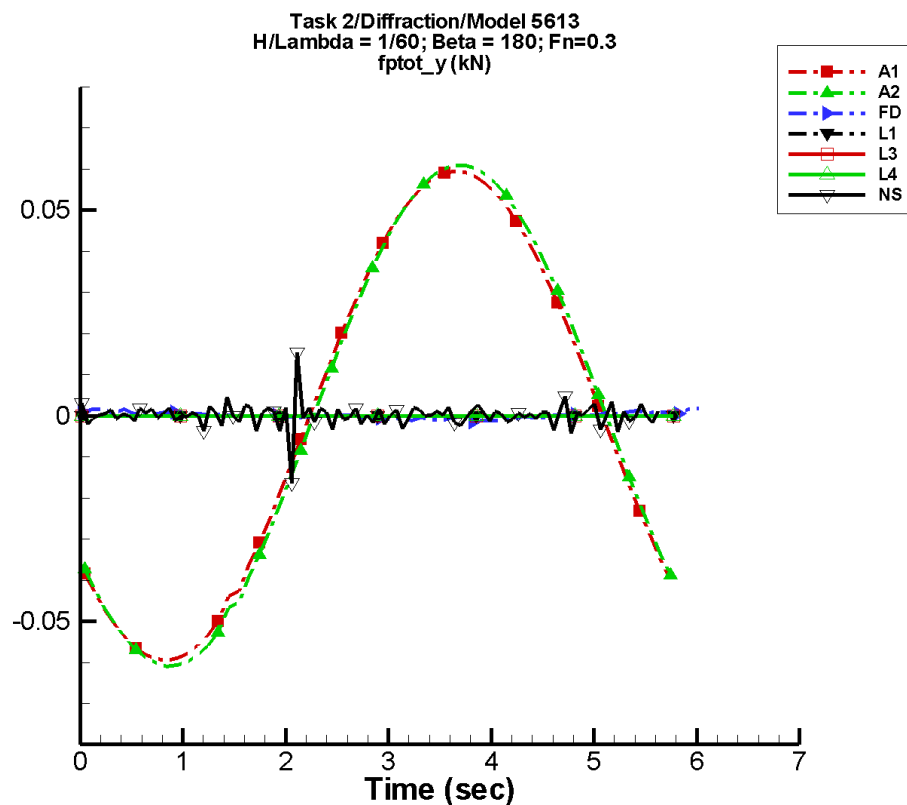
Table G–799. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.59E+04	1.42E-02	168	5.18E-03	-165
A2	6.57E+04	1.47E+04	-47	4.11E+03	11
FD	6.84E+04	1.26E+04	-79	6.29E+03	-74
L1	8.56E+04	1.15E-02	73	1.02E-02	105
L3	6.86E+04	1.28E+04	-57	6.33E+03	-33
L4	6.86E+04	1.28E+04	-57	6.33E+03	-33
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–800. Minimum and maximum of of F_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	8.59E+04	8.59E+04	8.59E+04	8.59E+04
A2	3.61E+04	7.79E+04	4.81E+04	7.68E+04
FD	5.03E+04	8.12E+04	5.11E+04	7.83E+04
L1	8.56E+04	8.56E+04	8.56E+04	8.56E+04
L3	5.01E+04	8.14E+04	5.07E+04	7.88E+04
L4	5.01E+04	8.14E+04	5.07E+04	7.88E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 0; Fn=0.0
fhst_mx (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–401. Time history of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
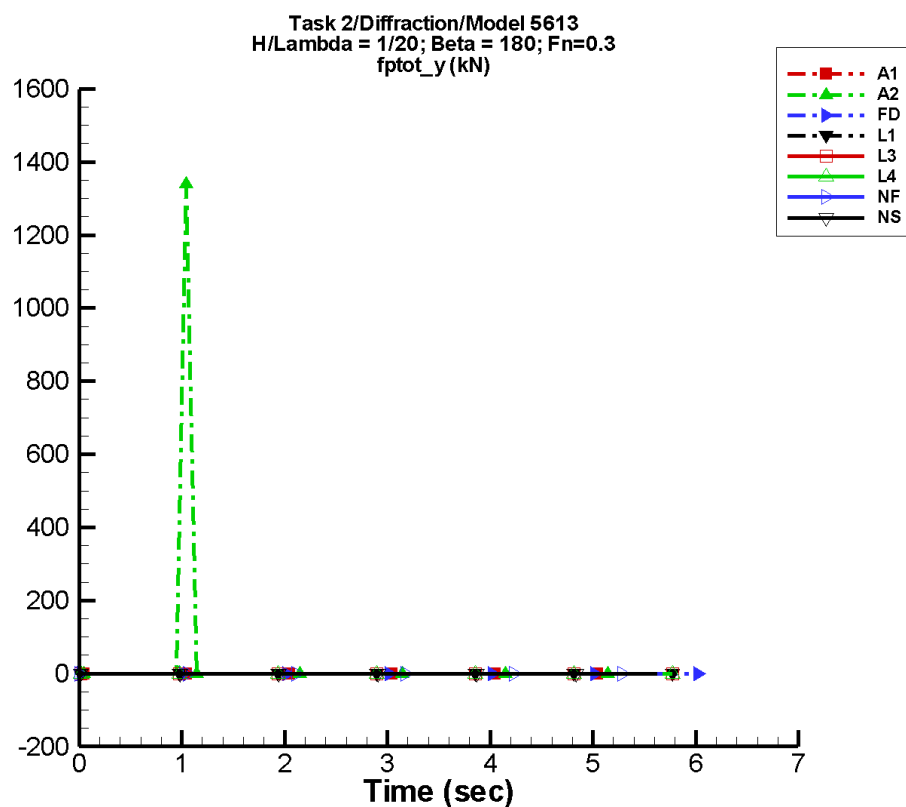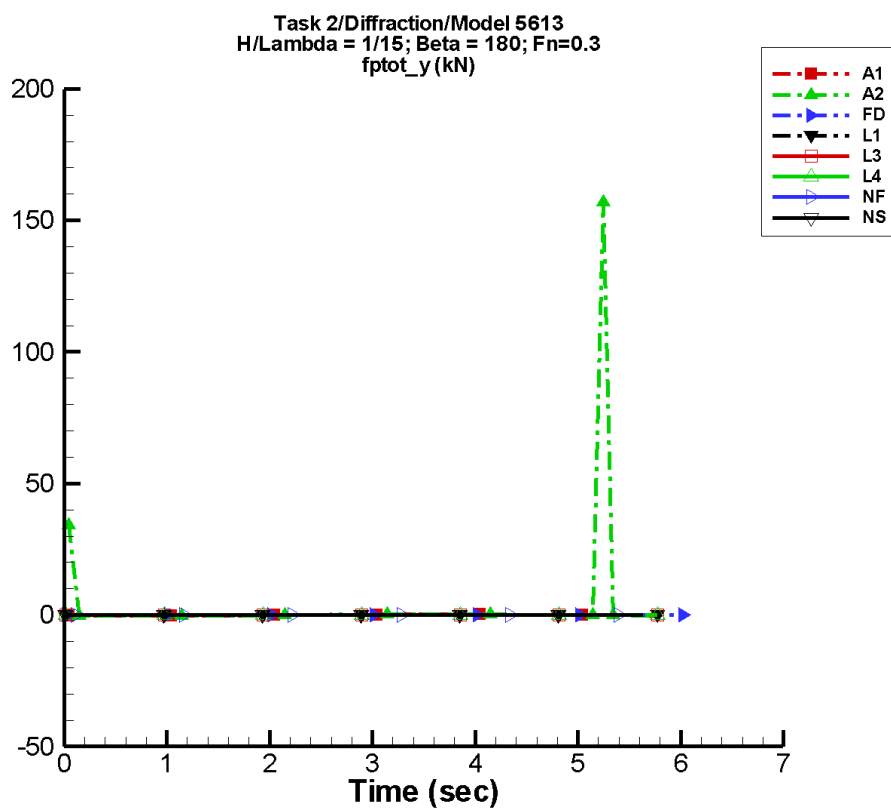
Table G–801. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	7.49E-05	1.37E-04	-76	1.12E-04	-104
FD	6.13E-05	4.05E-05	-33	3.90E-06	118
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.80E-04	2.61E-04	20	4.94E-04	-152

Table G–802. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-6.03E-04	1.57E-03	-1.39E-04	8.03E-04
FD	3.05E-05	2.81E-04	2.72E-05	1.28E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-9.87E-03	1.12E-02	-2.03E-03	1.77E-03

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–402. Time history of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
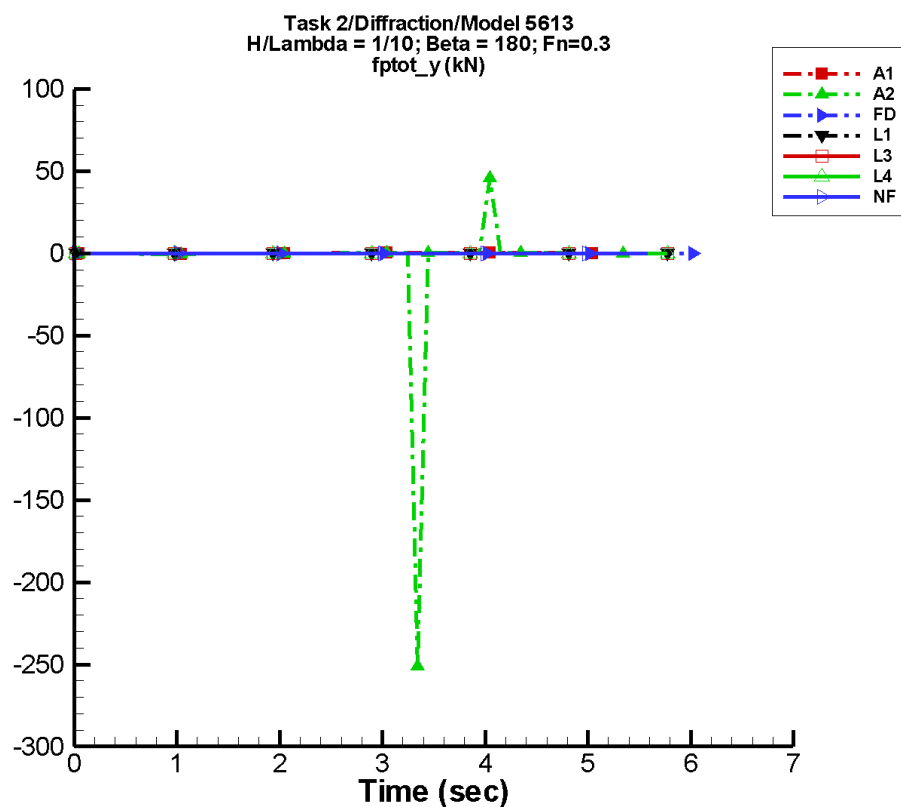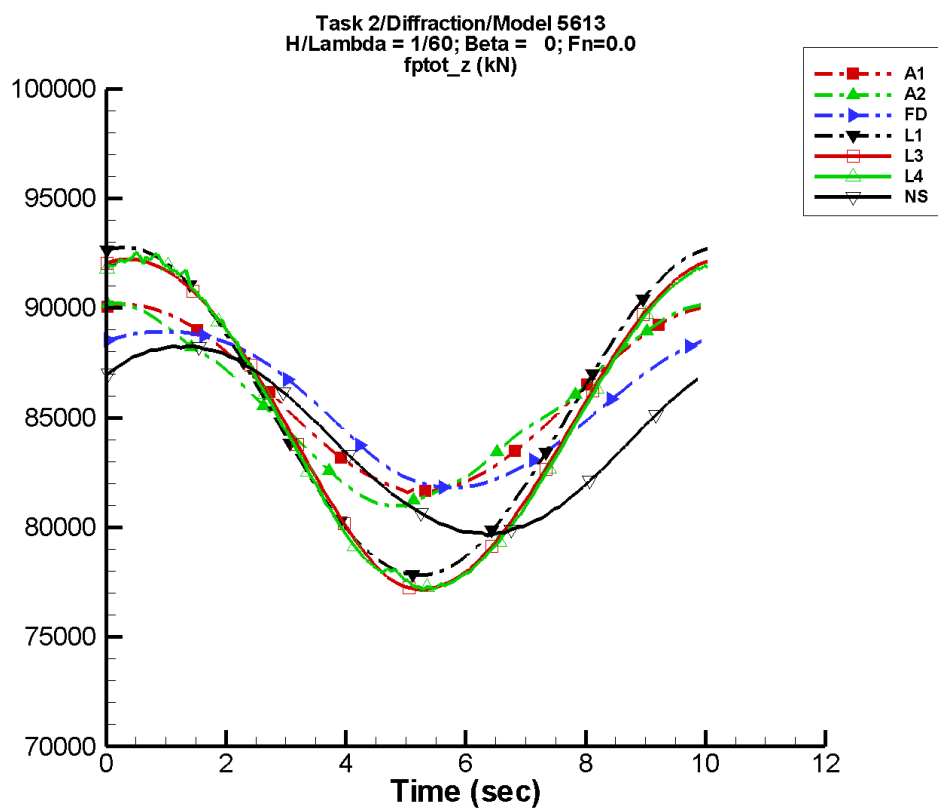
Table G–803. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	269.	447.	-6	182.	-102
FD	-2.68E-05	8.82E-05	22	2.71E-05	-103
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.48E-04	1.27E-03	125	2.00E-03	81

Table G–804. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-5.46E-02	1.48E+04	-227.	1.98E+03
FD	-4.07E-04	2.81E-04	-1.48E-04	1.49E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.24E-02	1.60E-02	-5.45E-03	4.87E-03

Figure G–403. Time history of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–805. Coefficients of the Fourier fit $a_0+a_1 \sin{(\omega t + \Phi_1)}+a_2 \sin{(2\omega t + \Phi_2)}+ \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	78.9	169.	70	196.	45
FD	-3.22E-05	1.76E-04	93	1.52E-04	-160
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	1.96E-04	1.56E-03	-13	1.00E-03	-136

Table G–806. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

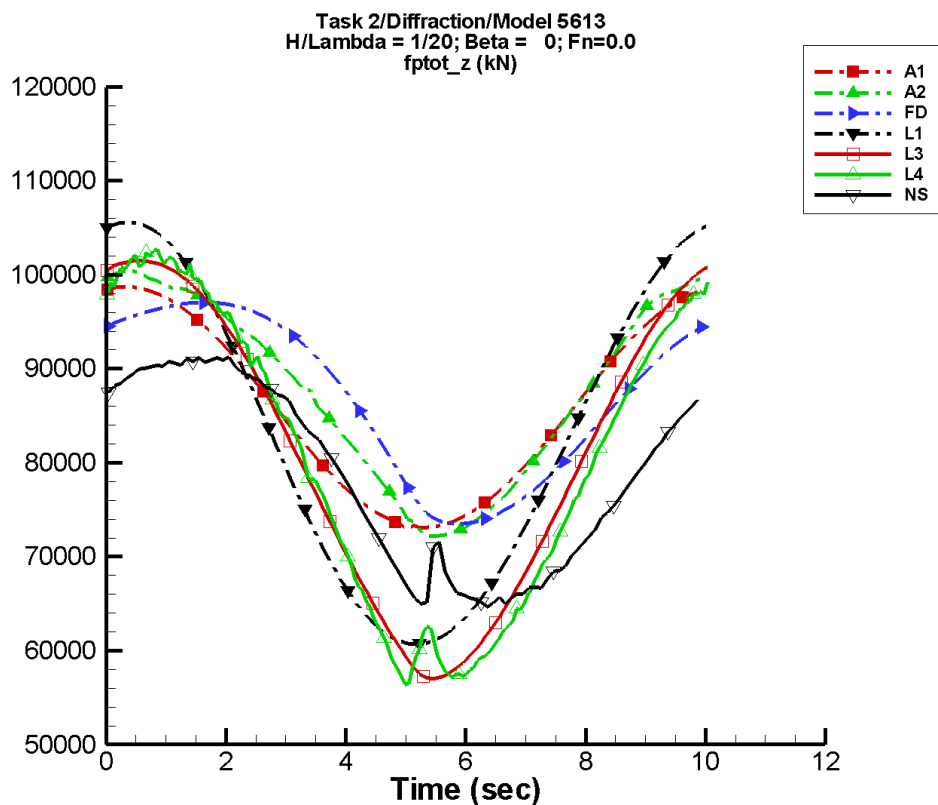| Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-7.63E-03	1.50E+04	-171.	2.00E+03
FD	-7.19E-04	3.43E-04	-4.08E-04	3.01E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.58E-02	1.65E-02	-8.83E-03	5.34E-03

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–404. Time history of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–807. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
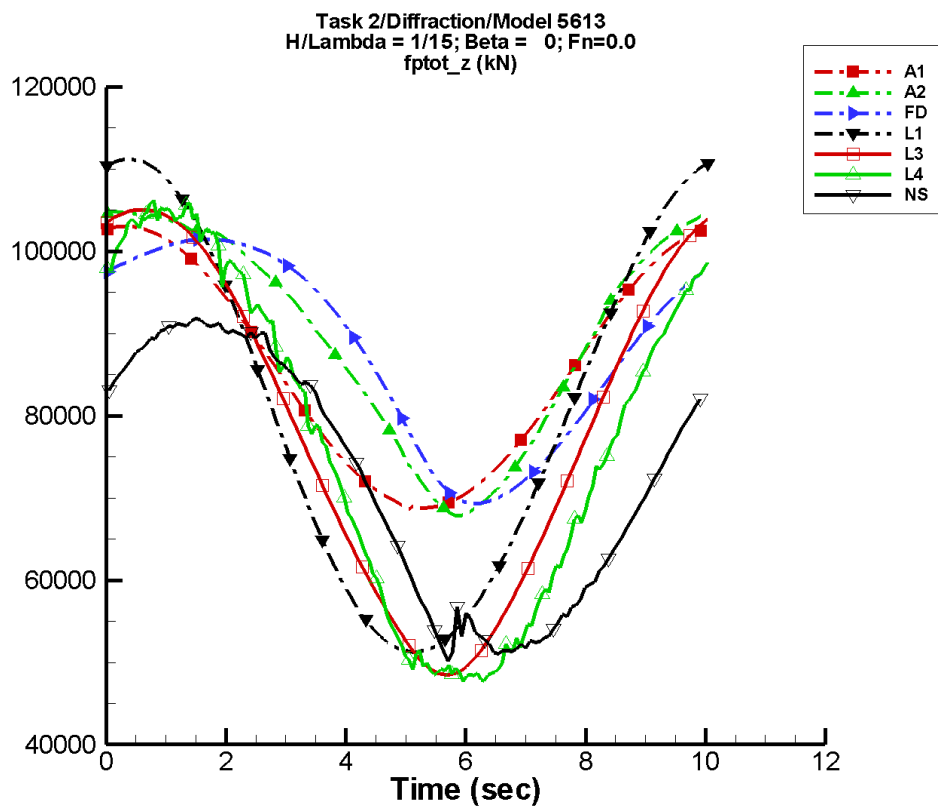
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-5.12	15.0	-38	26.3	-18
FD	1.00E-05	2.09E-04	104	1.35E-04	-162
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–808. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-1.11E+03	912.	-147.	117.
FD	-5.57E-04	5.31E-04	-3.26E-04	3.48E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–405. Time history of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

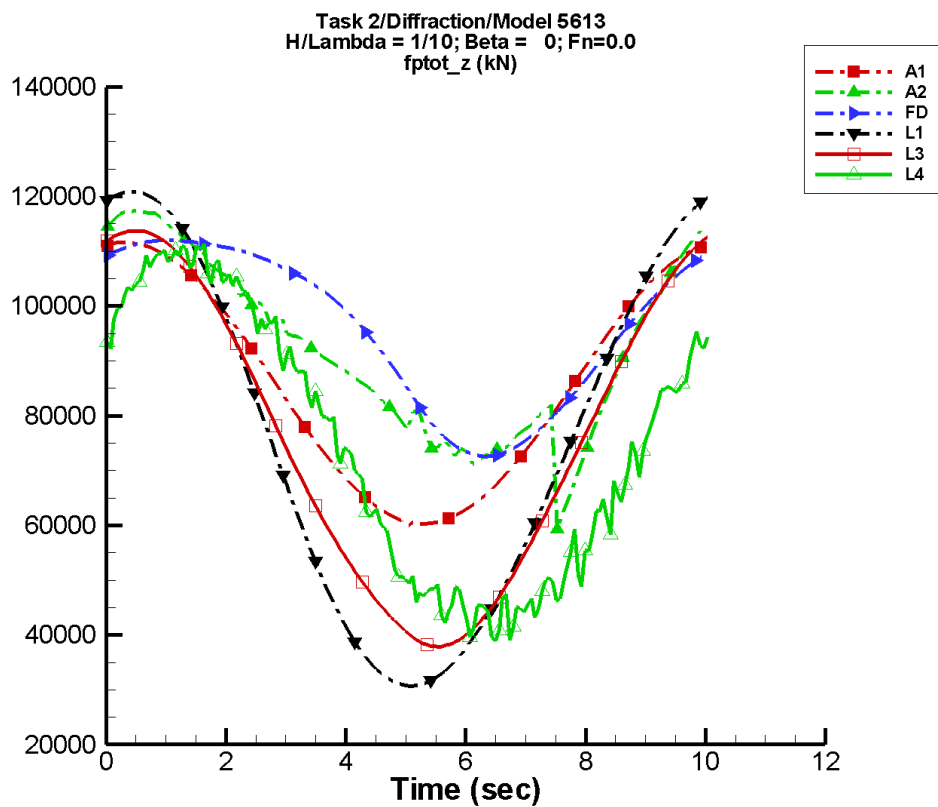Table G–809. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} +$ $\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	30.2	676.	-4	992.	-99
FD	15.4	468.	-34	430.	-172
L1	—	—	—	—	—
L3	-1.17	538.	-31	383.	-168
L4	-1.17	538.	-31	383.	-168
NF	—	—	—	—	—
NS	5.69	328.	-61	176.	-176

Table G–810. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.64E+03	2.87E+03	-1.57E+03	2.76E+03
FD	-1.07E+03	860.	-848.	838.
L1	—	—	—	—
L3	-963.	870.	-884.	864.
L4	-963.	870.	-884.	864.
NF	—	—	—	—
NS	-397.	644.	-388.	622.

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 45; Fn=0.0
fhst_mx (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–406. Time history of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
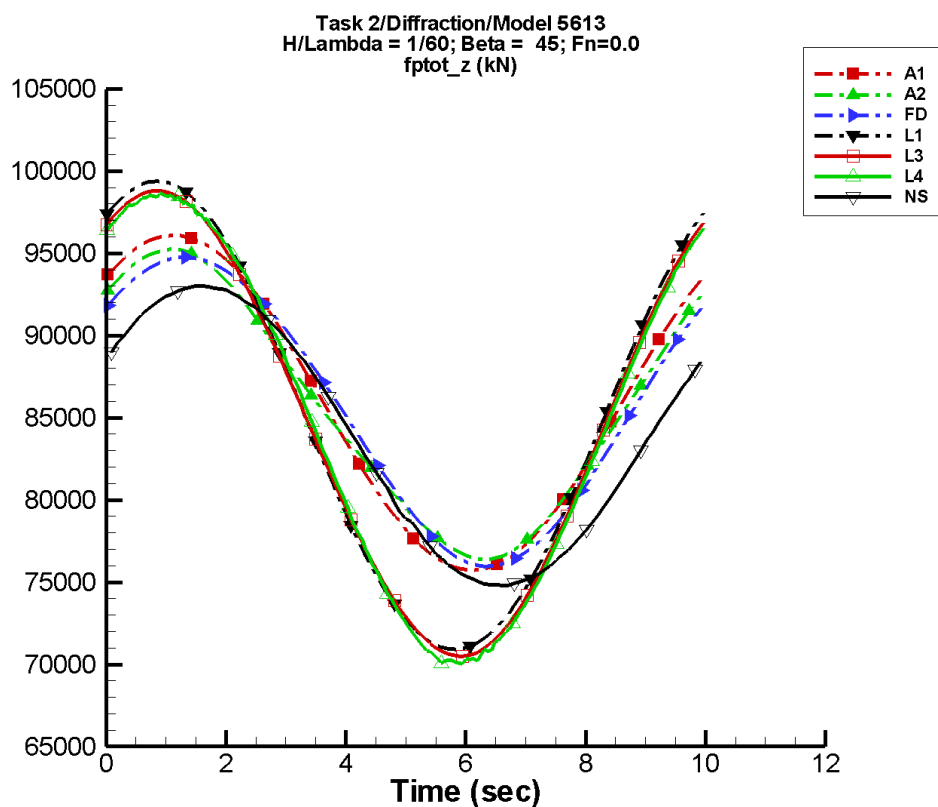
Table G–811. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-46.7	3.65E+03	-38	2.37E+03	144
FD	-6.36	3.16E+03	-39	1.97E+03	124
L1	—	—	—	—	—
L3	-117.	3.53E+03	-32	2.01E+03	126
L4	-117.	3.53E+03	-32	2.01E+03	126
NF	—	—	—	—	—
NS	274.	2.76E+03	-43	1.60E+03	133

Table G–812. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
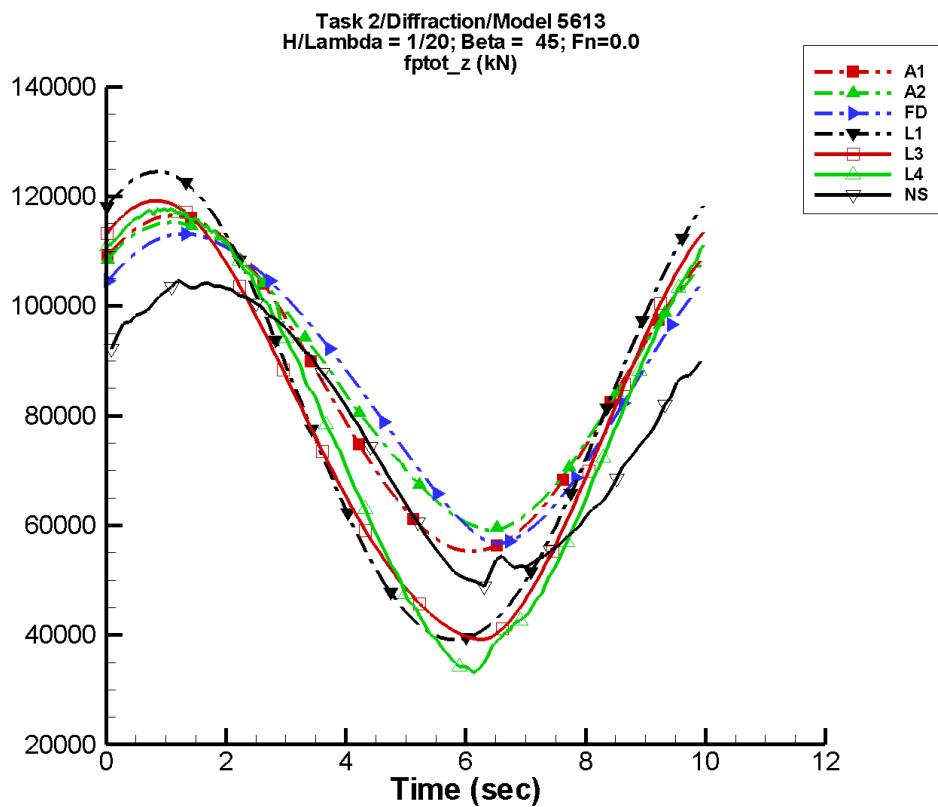
Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-1.61E+04	1.52E+04	-7.49E+03	5.81E+03
FD	-9.46E+03	4.37E+03	-6.71E+03	4.10E+03
L1	—	—	—	—
L3	-1.00E+04	4.27E+03	-8.52E+03	4.12E+03
L4	-1.00E+04	4.27E+03	-8.52E+03	4.12E+03
NF	—	—	—	—
NS	-5.87E+03	5.36E+03	-4.30E+03	4.01E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 45; Fn=0.0
fhst_mx (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–407. Time history of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
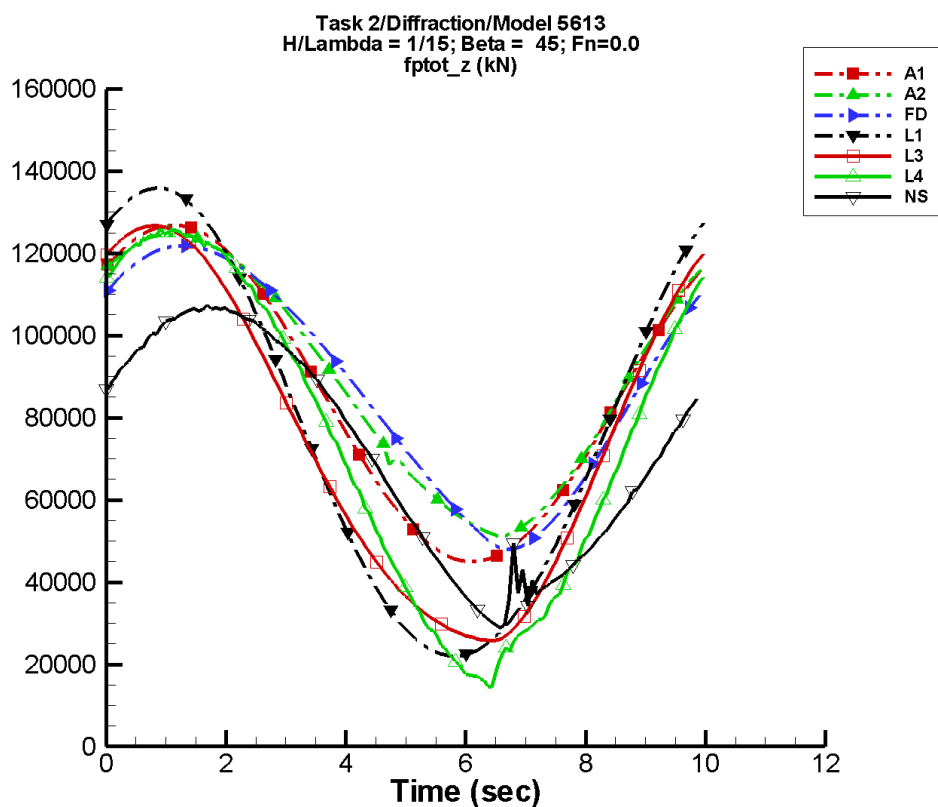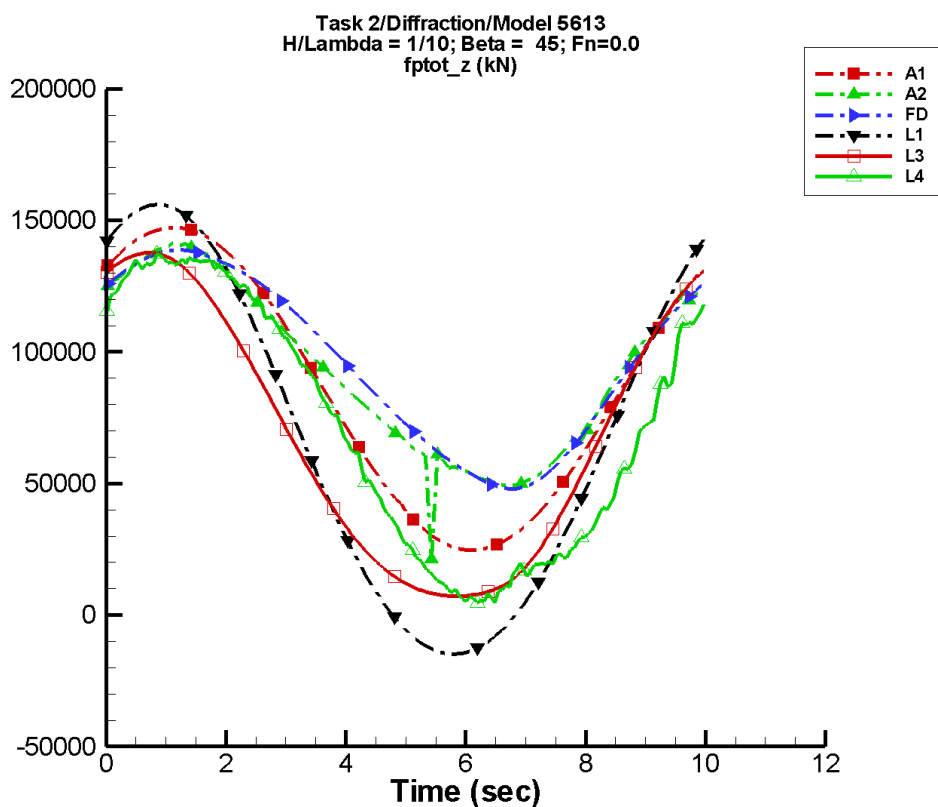
Table G–813. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-155.	6.62E+03	-60	2.18E+03	63
FD	-157.	5.87E+03	-59	3.01E+03	37
L1	—	—	—	—	—
L3	49.2	6.01E+03	-56	3.09E+03	34
L4	49.2	6.01E+03	-56	3.09E+03	34
NF	—	—	—	—	—
NS	511.	4.75E+03	-59	3.10E+03	51

Table G–814. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-1.48E+04	1.40E+04	-1.01E+04	8.74E+03
FD	-1.23E+04	1.01E+04	-9.21E+03	8.86E+03
L1	—	—	—	—
L3	-1.27E+04	1.03E+04	-1.12E+04	9.99E+03
L4	-1.27E+04	1.03E+04	-1.12E+04	9.99E+03
NF	—	—	—	—
NS	-9.79E+03	8.24E+03	-7.15E+03	8.15E+03

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–408. Time history of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–815. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	653.	7.07E+03	4	1.12E+04	-8
FD	387.	6.76E+03	-4	1.00E+04	-7
L1	—	—	—	—	—
L3	359.	5.62E+03	-5	8.33E+03	-2
L4	359.	5.62E+03	-5	8.33E+03	-2
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–816. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
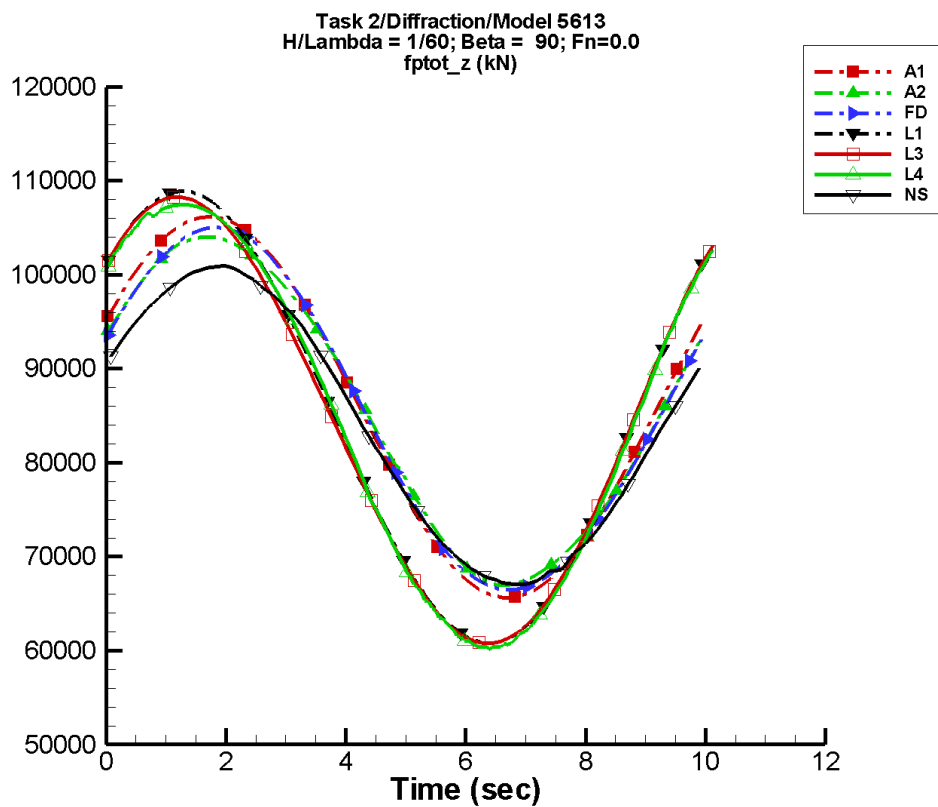
Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-2.15E+04	2.97E+04	-1.45E+04	2.37E+04
FD	-2.11E+04	2.51E+04	-1.79E+04	2.21E+04
L1	—	—	—	—
L3	-1.50E+04	1.97E+04	-1.38E+04	1.86E+04
L4	-1.50E+04	1.97E+04	-1.38E+04	1.86E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–409. Time history of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–817. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	28.6	1.08E+03	-86	1.52E+03	-30
FD	23.0	1.24E+03	-100	785.	-18
L1	—	—	—	—	—
L3	7.55	1.36E+03	-95	745.	-5
L4	7.55	1.36E+03	-95	745.	-5
NF	—	—	—	—	—
NS	-6.86	742.	-97	446.	-1

Table G–818. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
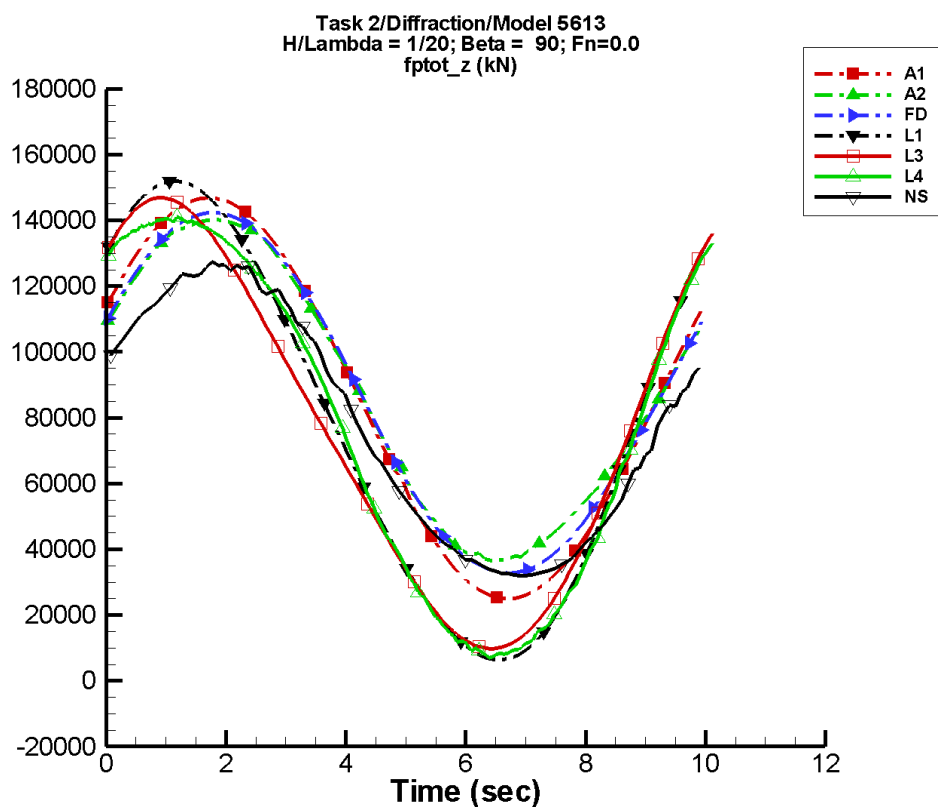
Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-3.97E+03	3.94E+03	-3.41E+03	3.42E+03
FD	-2.23E+03	2.23E+03	-2.13E+03	2.13E+03
L1	—	—	—	—
L3	-2.21E+03	2.21E+03	-2.18E+03	2.18E+03
L4	-2.21E+03	2.21E+03	-2.18E+03	2.18E+03
NF	—	—	—	—
NS	-1.27E+03	1.28E+03	-1.24E+03	1.25E+03

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–410. Time history of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

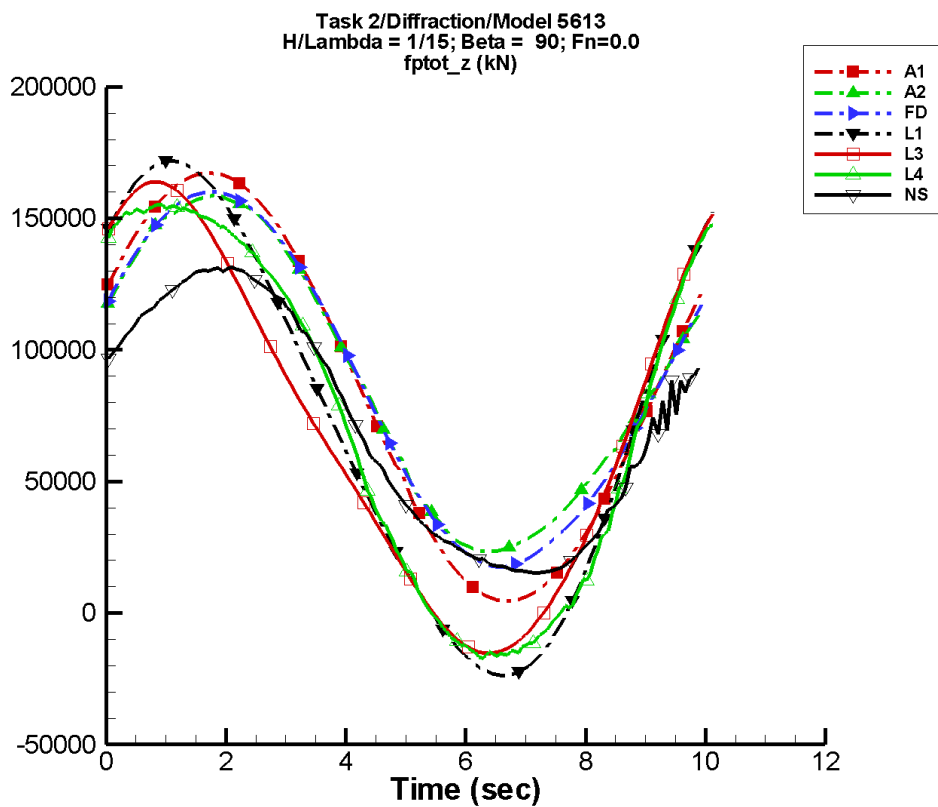Table G–819. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$,
$F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-139.	5.14E+03	-99	1.04E+04	-14
FD	12.7	4.98E+03	-99	1.15E+04	-17
L1	—	—	—	—	—
L3	-80.2	5.27E+03	-95	1.10E+04	-9
L4	-80.2	5.27E+03	-95	1.10E+04	-9
NF	—	—	—	—	—
NS	333.	3.79E+03	-99	8.04E+03	-10

Table G–820. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/20$,
$\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-2.74E+04	2.63E+04	-1.63E+04	1.55E+04
FD	-1.53E+04	1.53E+04	-1.47E+04	1.47E+04
L1	—	—	—	—
L3	-1.50E+04	1.50E+04	-1.47E+04	1.47E+04
L4	-1.50E+04	1.50E+04	-1.47E+04	1.47E+04
NF	—	—	—	—
NS	-1.05E+04	1.23E+04	-9.47E+03	1.18E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–411. Time history of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
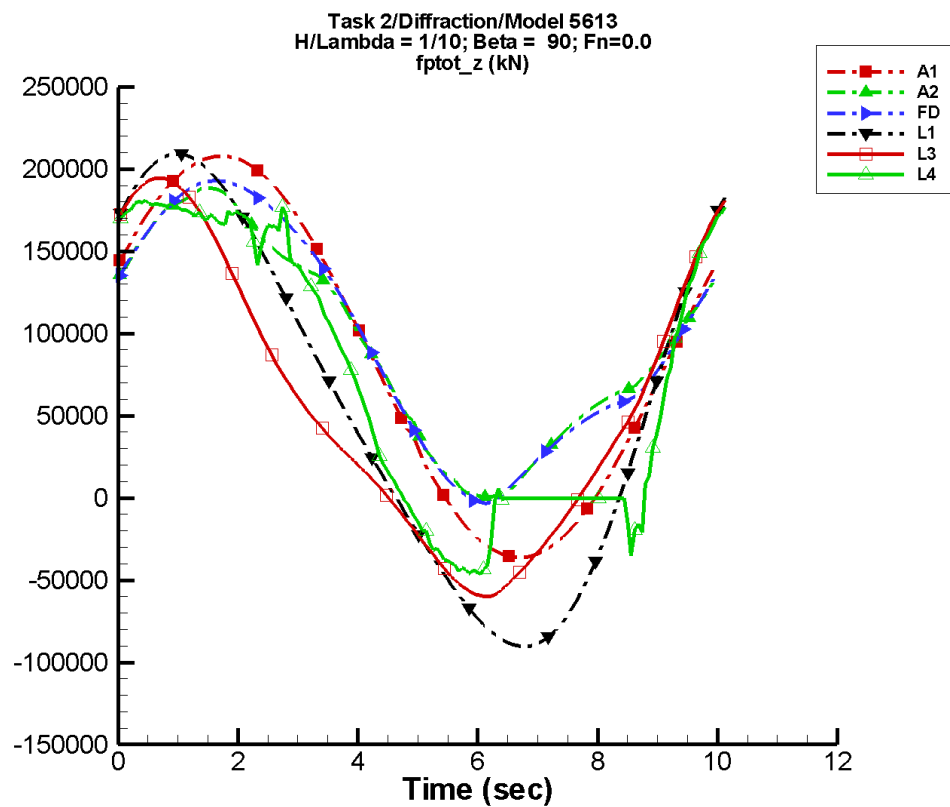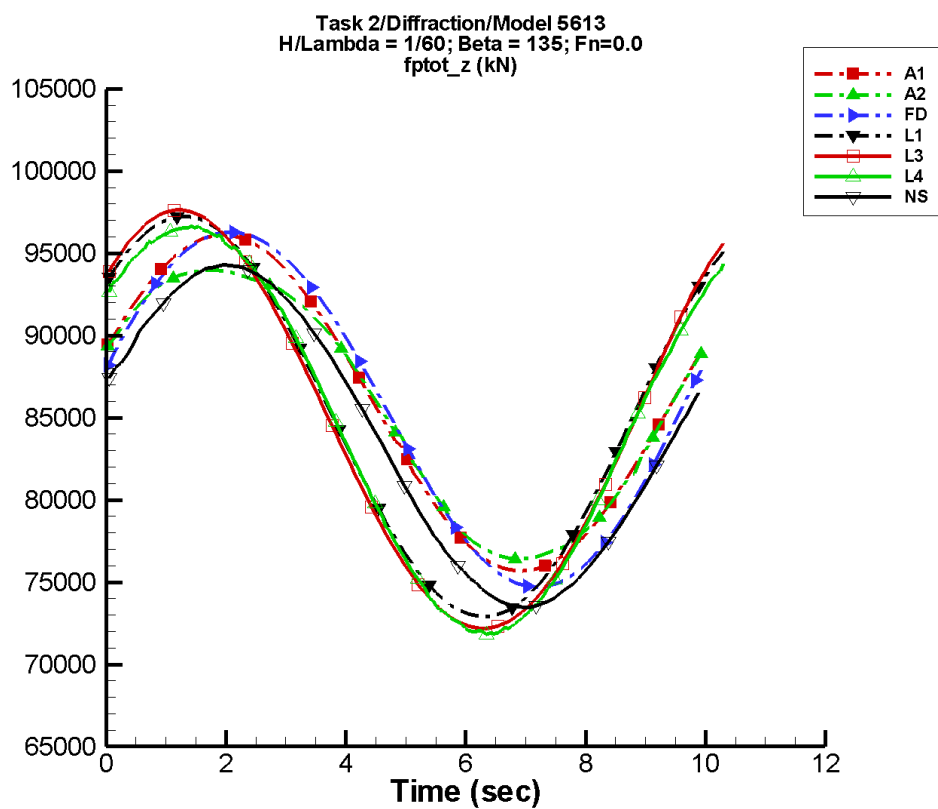
Table G–821. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	349.	8.87E+03	-103	2.57E+04	-16
FD	66.6	7.79E+03	-102	2.90E+04	-18
L1	—	—	—	—	—
L3	-289.	8.47E+03	-95	2.87E+04	-9
L4	-289.	8.47E+03	-95	2.87E+04	-9
NF	—	—	—	—	—
NS	579.	5.19E+03	-101	1.90E+04	-9

Table G–822. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-4.04E+04	4.05E+04	-3.48E+04	3.75E+04
FD	-3.96E+04	3.96E+04	-3.68E+04	3.70E+04
L1	—	—	—	—
L3	-3.99E+04	3.99E+04	-3.89E+04	3.89E+04
L4	-3.99E+04	3.99E+04	-3.89E+04	3.89E+04
NF	—	—	—	—
NS	-2.35E+04	2.78E+04	-2.18E+04	2.65E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.0
fhst_mx (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–412. Time history of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–823. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
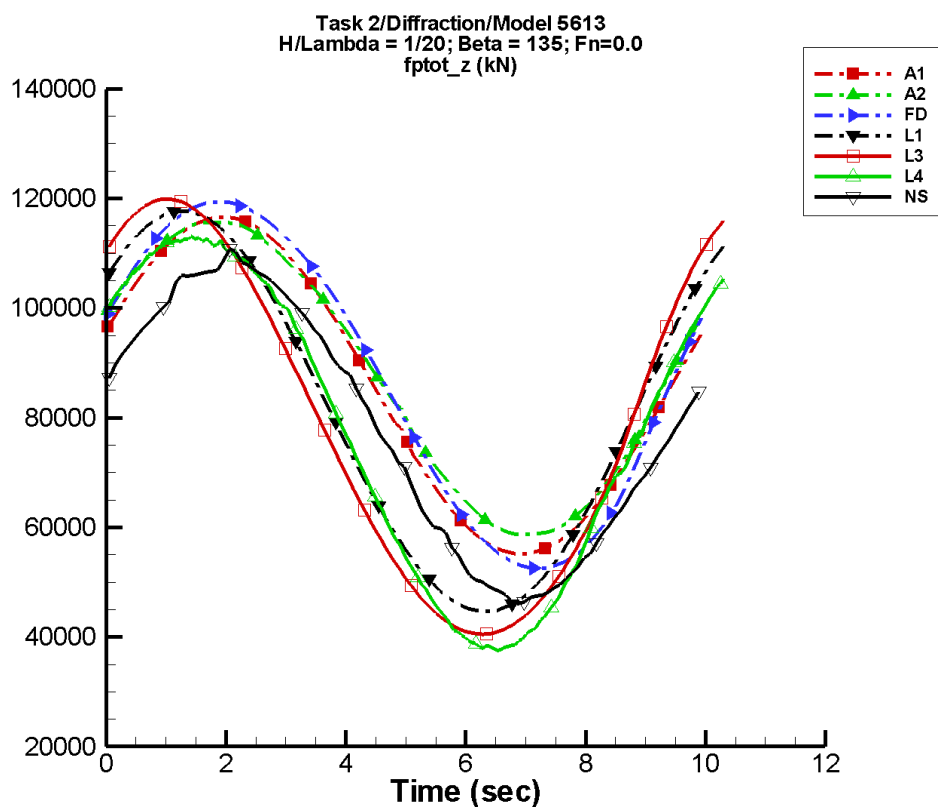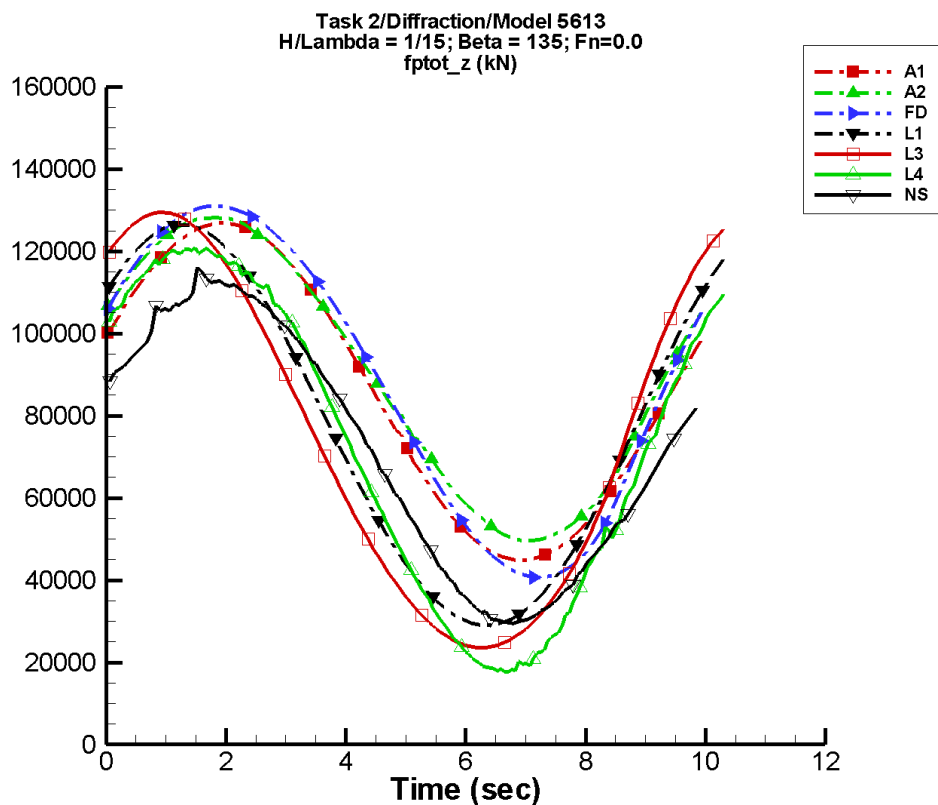
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-156.	3.70E+03	64	5.32E+04	-17
FD	-770.	3.37E+03	39	5.26E+04	-12
L1	—	—	—	—	—
L3	226.	3.22E+03	65	5.54E+04	-9
L4	226.	3.22E+03	65	5.54E+04	-9
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–824. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-9.96E+04	1.01E+05	-7.52E+04	7.57E+04
FD	-9.20E+04	9.37E+04	-7.11E+04	7.14E+04
L1	—	—	—	—
L3	-9.49E+04	9.49E+04	-8.73E+04	8.75E+04
L4	-9.49E+04	9.49E+04	-8.73E+04	8.75E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–413. Time history of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–825. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-7.90	433.	175	628.	66
FD	-15.8	493.	-156	377.	139
L1	—	—	—	—	—
L3	2.13	533.	-154	378.	144
L4	2.13	533.	-154	378.	144
NF	—	—	—	—	—
NS	-3.02	347.	-124	198.	166

Table G–826. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

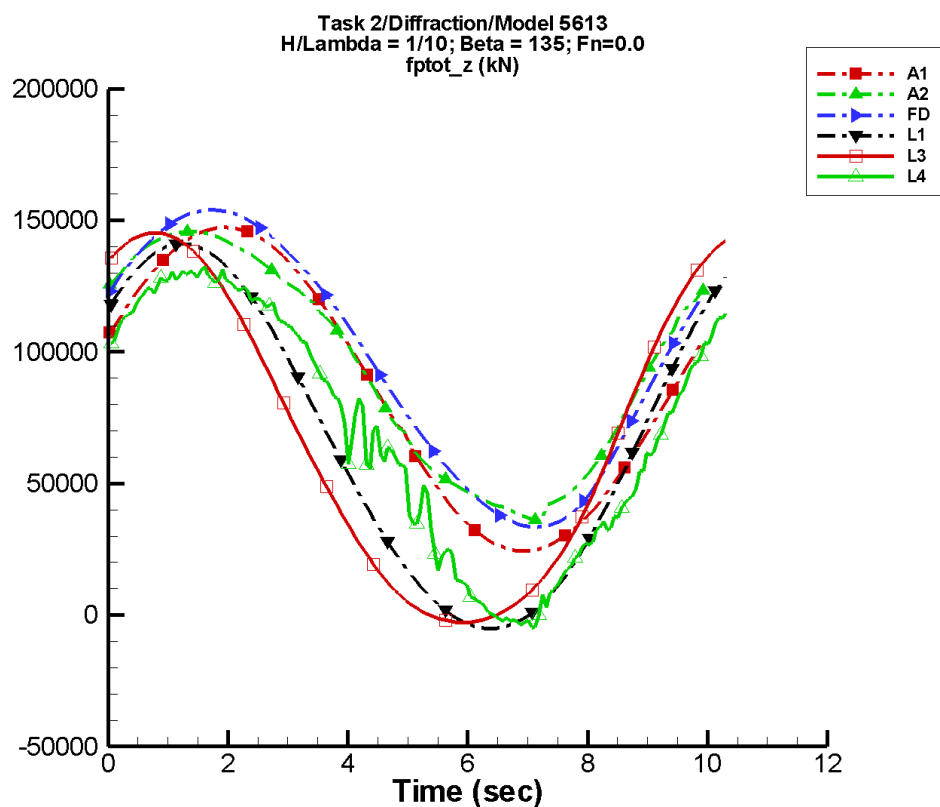| Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-2.86E+03	1.65E+03	-2.44E+03	1.57E+03
FD	-862.	1.06E+03	-839.	848.
L1	—	—	—	—
L3	-870.	963.	-865.	886.
L4	-870.	963.	-865.	886.
NF	—	—	—	—
NS	-639.	398.	-618.	388.

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–414. Time history of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
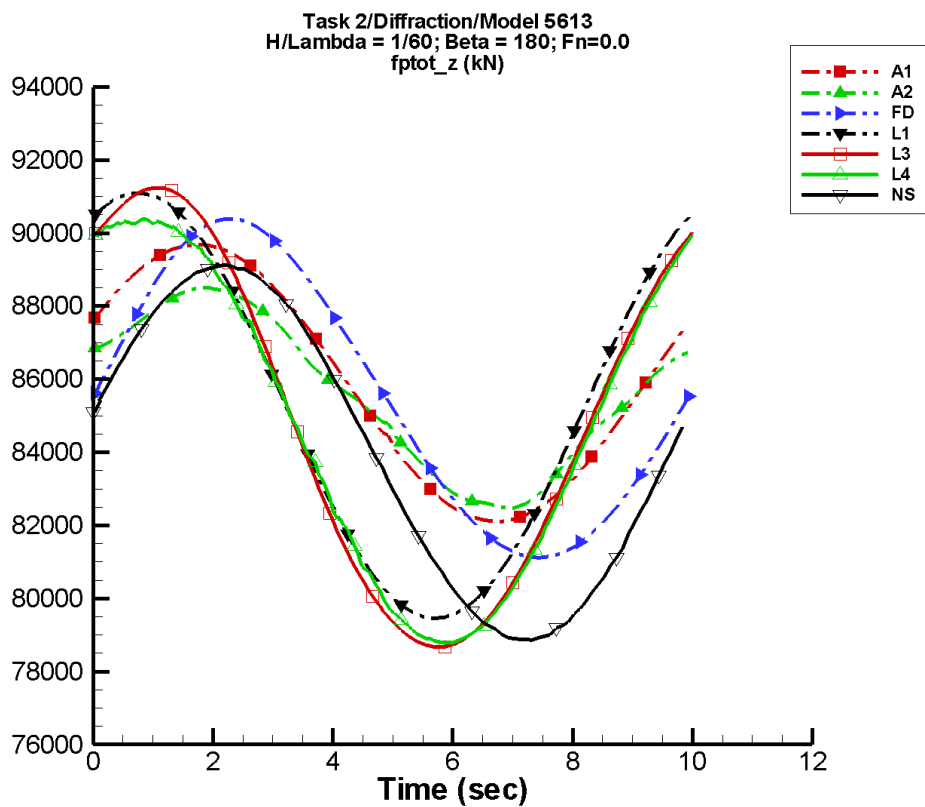
Table G–827. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	224.	3.81E+03	-154	2.54E+03	-179
FD	-80.5	2.94E+03	-152	1.57E+03	-163
L1	—	—	—	—	—
L3	43.6	3.25E+03	-155	1.80E+03	-154
L4	43.6	3.25E+03	-155	1.80E+03	-154
NF	—	—	—	—	—
NS	269.	2.42E+03	-156	1.75E+03	-149

Table G–828. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-6.31E+03	1.43E+04	-5.74E+03	7.92E+03
FD	-4.35E+03	9.46E+03	-4.10E+03	6.68E+03
L1	—	—	—	—
L3	-4.27E+03	1.00E+04	-4.12E+03	8.52E+03
L4	-4.27E+03	1.00E+04	-4.12E+03	8.52E+03
NF	—	—	—	—
NS	-4.19E+03	8.36E+03	-3.35E+03	6.34E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.0
fhst_mx (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–415. Time history of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

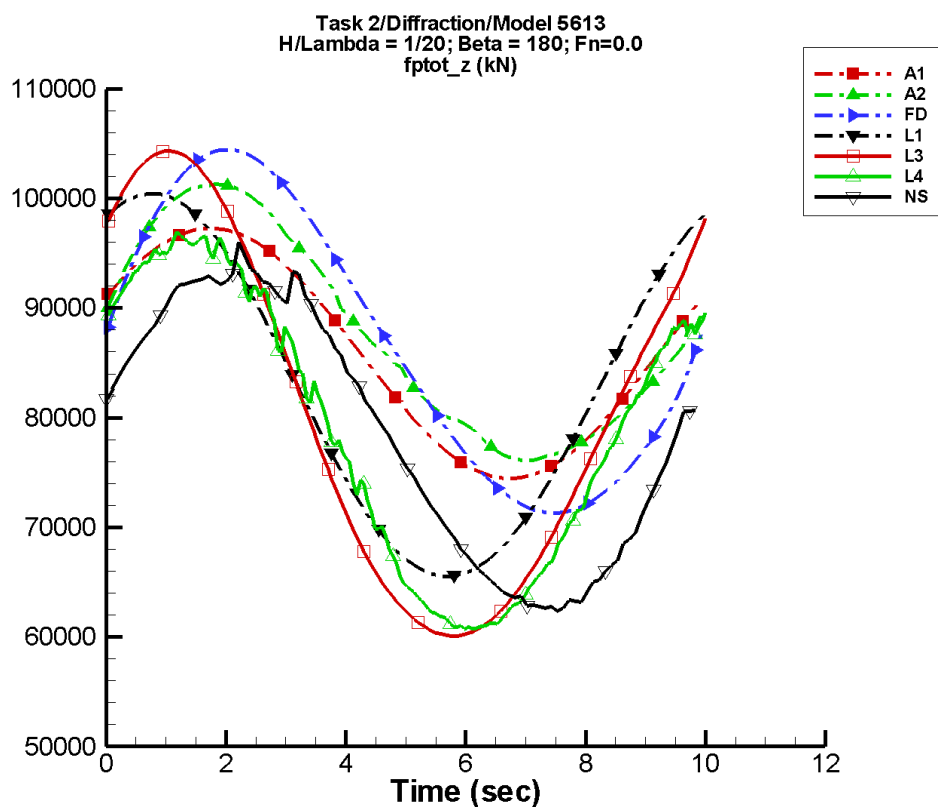Table G–829. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	395.	6.76E+03	-134	2.29E+03	-98
FD	86.7	5.37E+03	-138	2.46E+03	-74
L1	—	—	—	—	—
L3	-28.8	5.96E+03	-135	3.17E+03	-61
L4	-28.8	5.96E+03	-135	3.17E+03	-61
NF	—	—	—	—	—
NS	558.	4.45E+03	-146	2.79E+03	-66

Table G–830. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

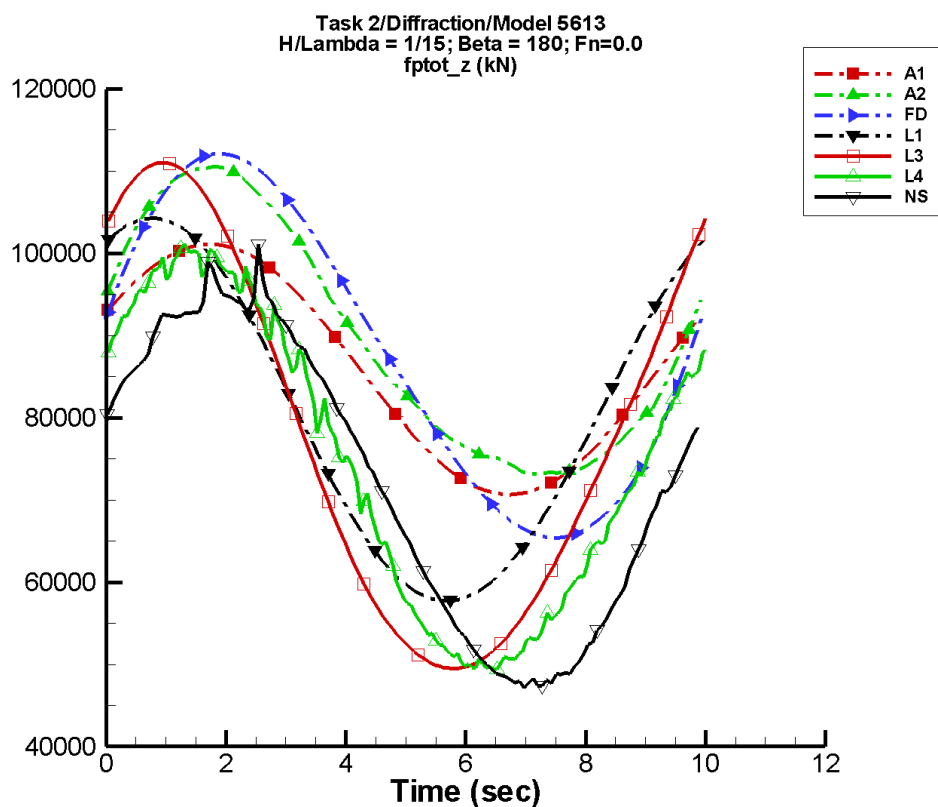| Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-1.07E+04	1.77E+04	-8.34E+03	9.98E+03
FD	-1.01E+04	1.22E+04	-8.88E+03	9.18E+03
L1	—	—	—	—
L3	-1.03E+04	1.27E+04	-9.99E+03	1.12E+04
L4	-1.03E+04	1.27E+04	-9.99E+03	1.12E+04
NF	—	—	—	—
NS	-7.93E+03	1.30E+04	-7.15E+03	1.06E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–416. Time history of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–831. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
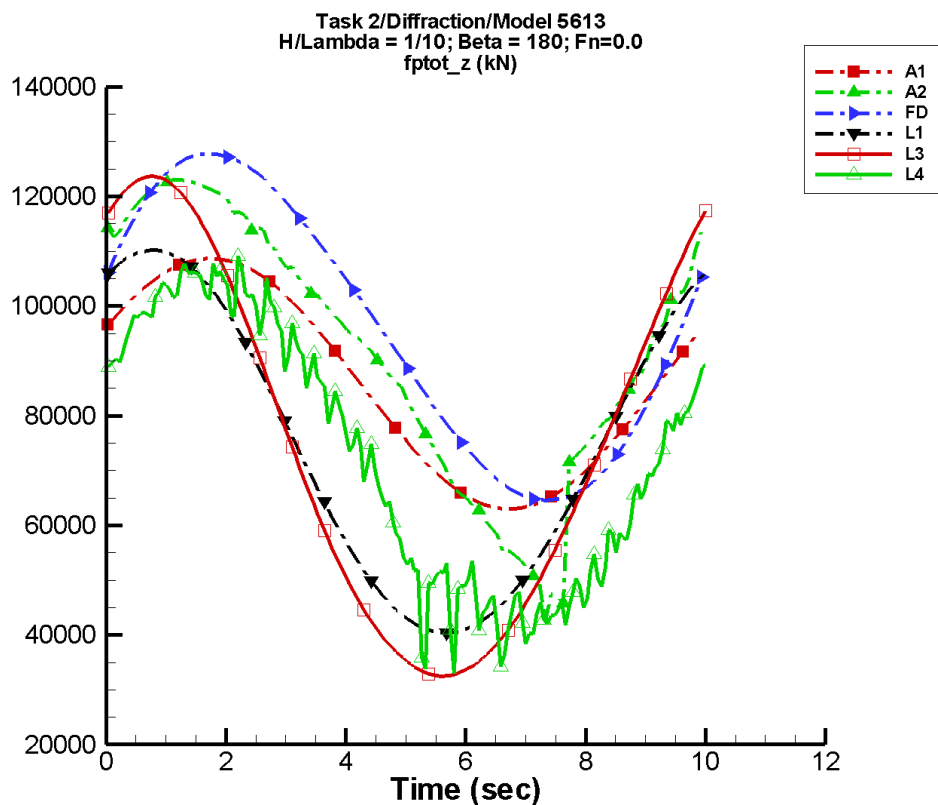
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-349.	7.54E+03	175	1.08E+04	-15
FD	-20.7	6.93E+03	178	1.02E+04	-20
L1	—	—	—	—	—
L3	-116.	5.94E+03	-177	8.52E+03	-15
L4	-116.	5.94E+03	-177	8.52E+03	-15
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–832. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-2.59E+04	2.02E+04	-2.35E+04	1.84E+04
FD	-2.49E+04	2.17E+04	-2.23E+04	1.83E+04
L1	—	—	—	—
L3	-1.98E+04	1.50E+04	-1.82E+04	1.37E+04
L4	-1.98E+04	1.50E+04	-1.82E+04	1.37E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 180; Fn=0.0
fhst_mx (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–417. Time history of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
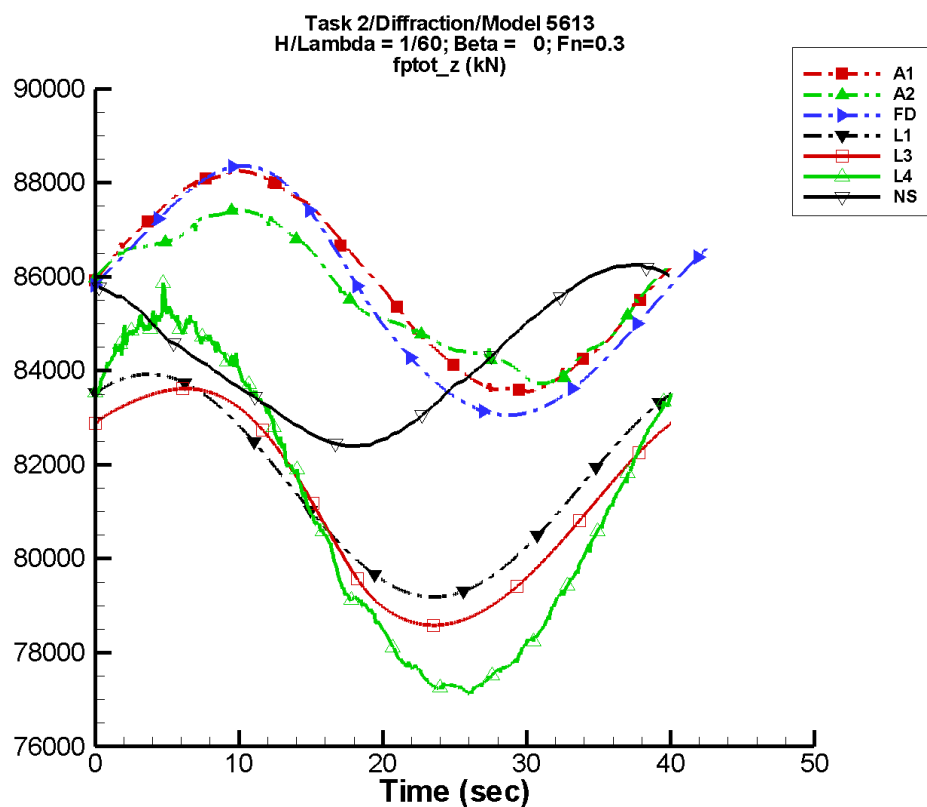
Table G–833. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	8.11E-05	2.18E-04	17	1.99E-04	-95
FD	1.18E-04	8.96E-05	34	3.90E-05	34
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.55E-04	1.13E-03	59	8.73E-04	-97

Table G–834. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(kN-m)	(kN-m)	(kN-m)	(kN-m)
A1	—	—	—	—
A2	-9.98E-04	1.74E-03	-2.90E-04	1.01E-03
FD	-6.57E-04	6.56E-04	-4.99E-05	2.98E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.01E-02	7.61E-03	-3.45E-03	4.26E-03

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–418. Time history of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
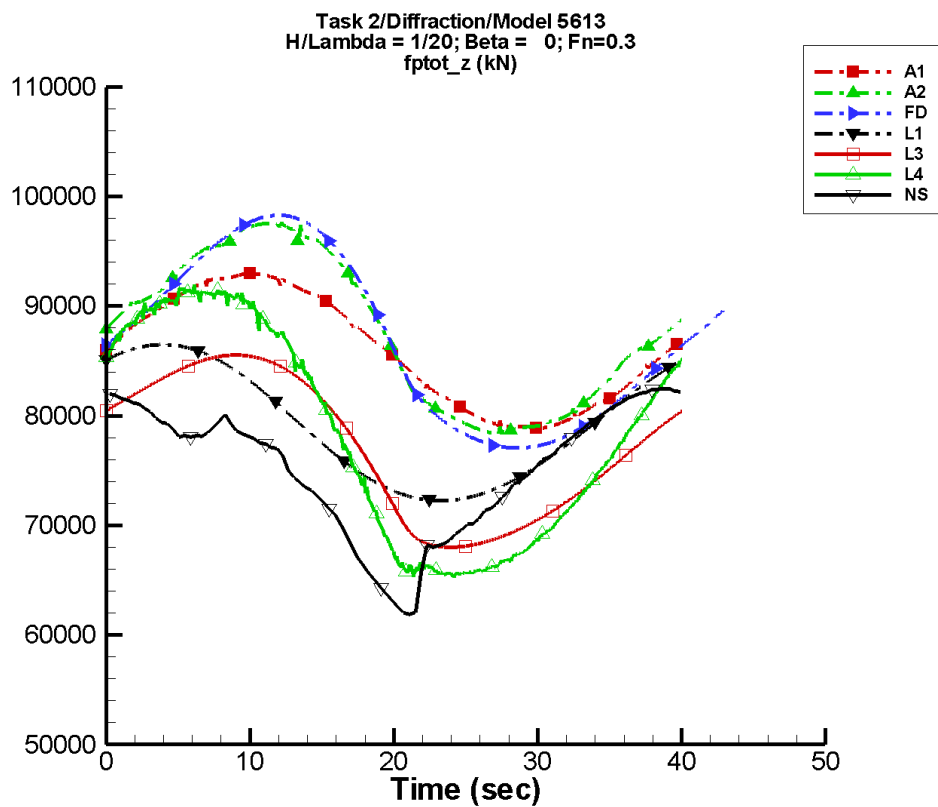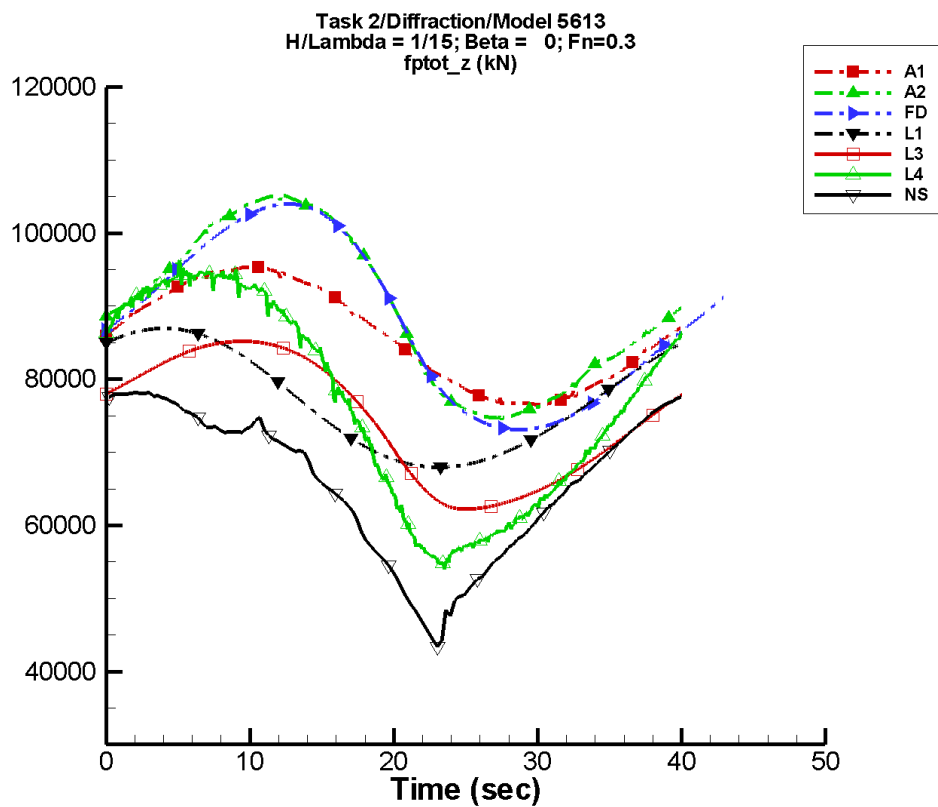
Table G–835. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	202.	457.	-38	185.	-135
FD	-1.07E-02	9.19E-03	-25	1.47E-02	73
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	3.06E-04	7.05E-04	31	1.74E-03	99

Table G–836. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

| Code | Unfiltered | | Filtered | |
	Minimum (kN-m)	Maximum (kN-m)	Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-5.57E+03	1.50E+04	-778.	2.00E+03
FD	-5.48E-02	7.47E-03	-4.97E-02	1.57E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-9.62E-03	1.06E-02	-3.50E-03	3.64E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 180; Fn=0.0
fhst_mx (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–419. Time history of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
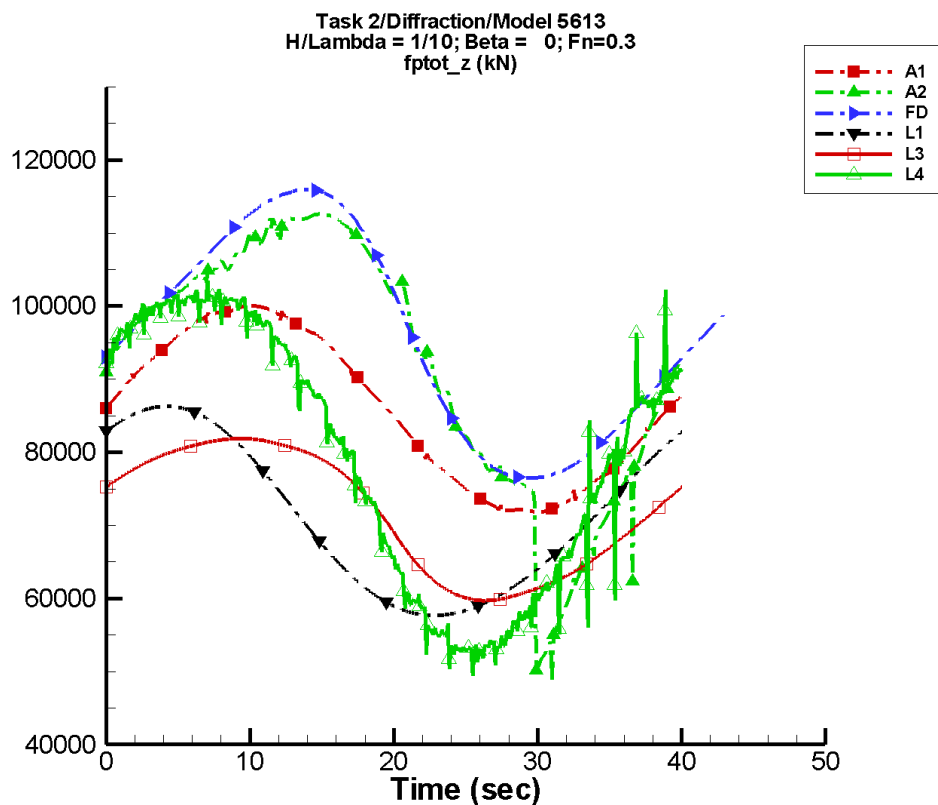
Table G–837. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	39.3	69.6	105	54.8	135
FD	-1.09E-02	4.55E-03	155	9.22E-03	67
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-4.30E-04	1.58E-03	9	1.14E-03	-76

Table G–838. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-7.36E-03	3.24E+03	-36.7	428.
FD	-5.03E-02	6.41E-03	-3.15E-02	6.79E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.46E-02	1.64E-02	-6.31E-03	6.80E-03

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–420. Time history of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
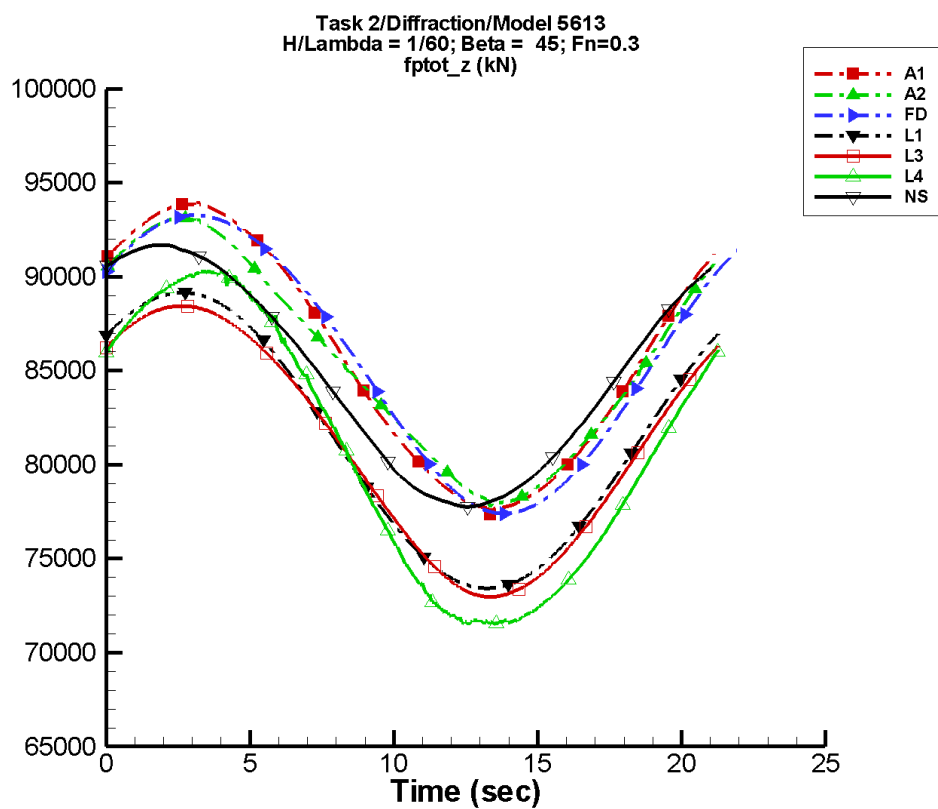
Table G–839. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	395.	631.	-158	766.	-16
FD	-4.73E-03	8.22E-04	-129	3.94E-03	-117
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–840. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-7.45E+03	4.01E+04	-1.24E+03	5.31E+03
FD	-8.60E-02	8.79E-02	-1.81E-02	1.37E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 0; Fn=0.3
fhst_mx (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–421. Time history of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
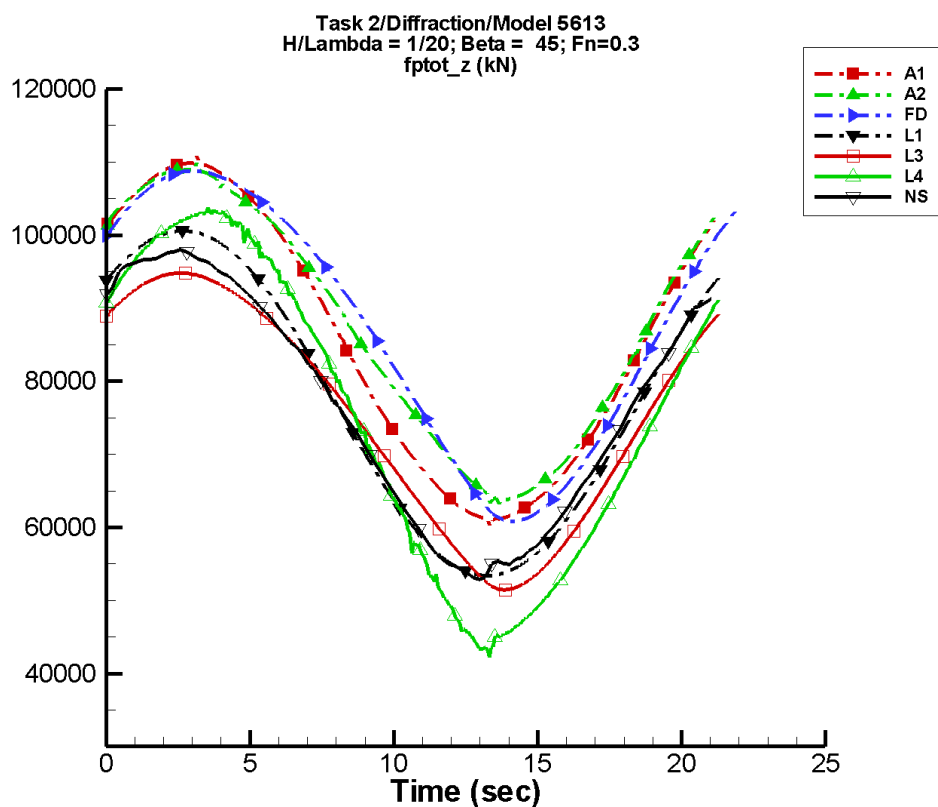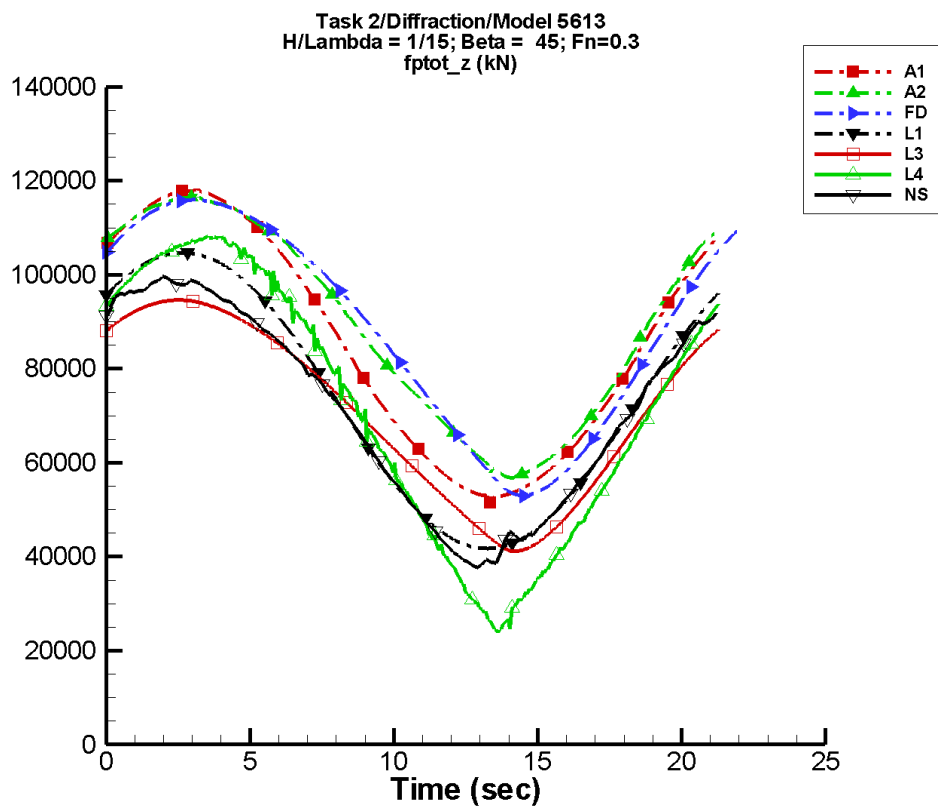
Table G–841. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	8.71E-05	1.49E-04	-49	9.96E-05	-110
FD	6.42E-05	4.19E-05	-26	4.79E-06	77
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.57E-04	8.66E-04	-13	8.33E-04	-64

Table G–842. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.19E-03	4.99E-03	-3.31E-04	1.33E-03
FD	3.05E-05	2.81E-04	2.52E-05	1.55E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.01E-02	1.18E-02	-2.85E-03	2.98E-03

Figure G–422. Time history of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–843. Coefficients of the Fourier fit $a_0+a_1\sin\left(\omega t+\Phi_1\right)+a_2\sin\left(2\omega t+\Phi_2\right)+$ $\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	189.	254.	-6	21.7	-27
FD	-2.39E-05	7.51E-05	29	2.98E-05	-84
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-9.66E-05	4.79E-04	-85	1.27E-03	61

Table G–844. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-1.33	1.50E+04	-408.	5.40E+03
FD	-4.07E-04	2.81E-04	-1.82E-04	1.73E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.35E-02	1.07E-02	-7.61E-03	2.87E-03

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–423. Time history of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
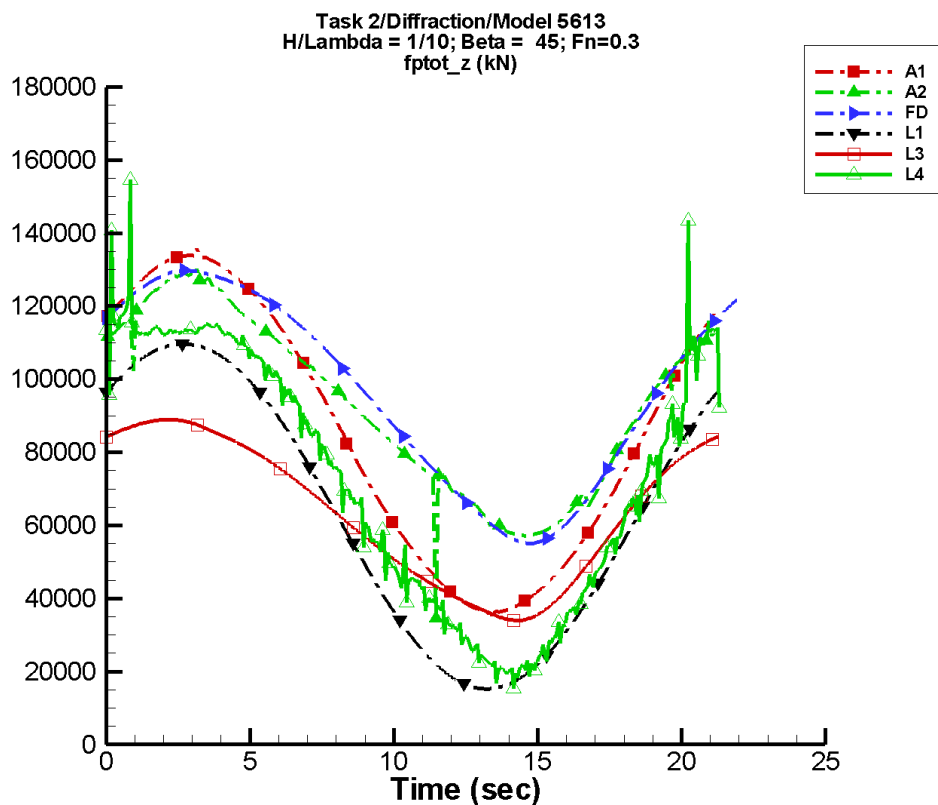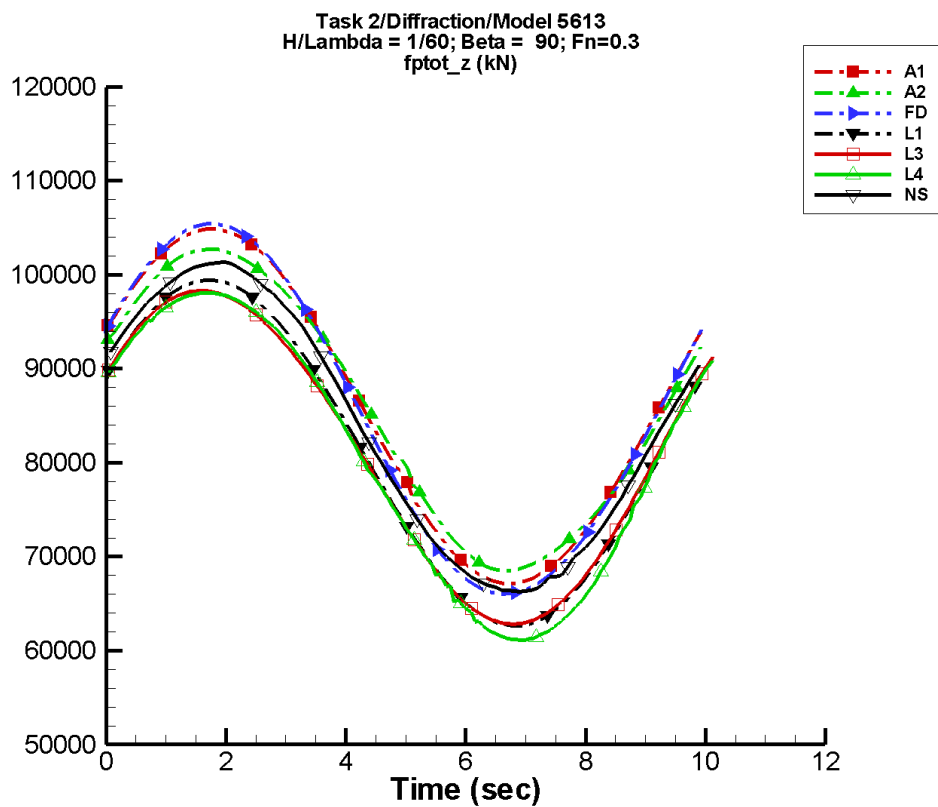
Table G–845. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	125.	60.9	-59	149.	76
FD	-2.52E-05	1.77E-04	102	1.44E-04	-158
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-8.62E-04	1.98E-03	-20	3.06E-03	-148

Table G–846. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

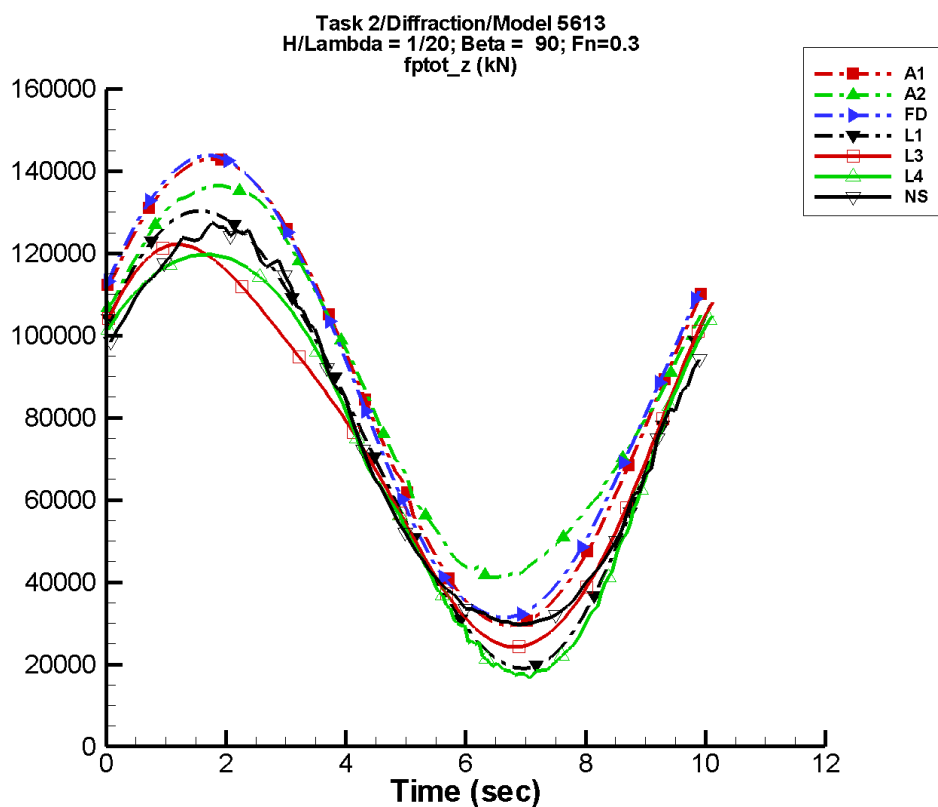| Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-8.30E-03	1.50E+04	-171.	2.00E+03
FD	-6.57E-04	4.68E-04	-4.83E-04	3.59E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.79E-02	1.93E-02	-9.29E-03	5.83E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 0; Fn=0.3
fhst_mx (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–424. Time history of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–847. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
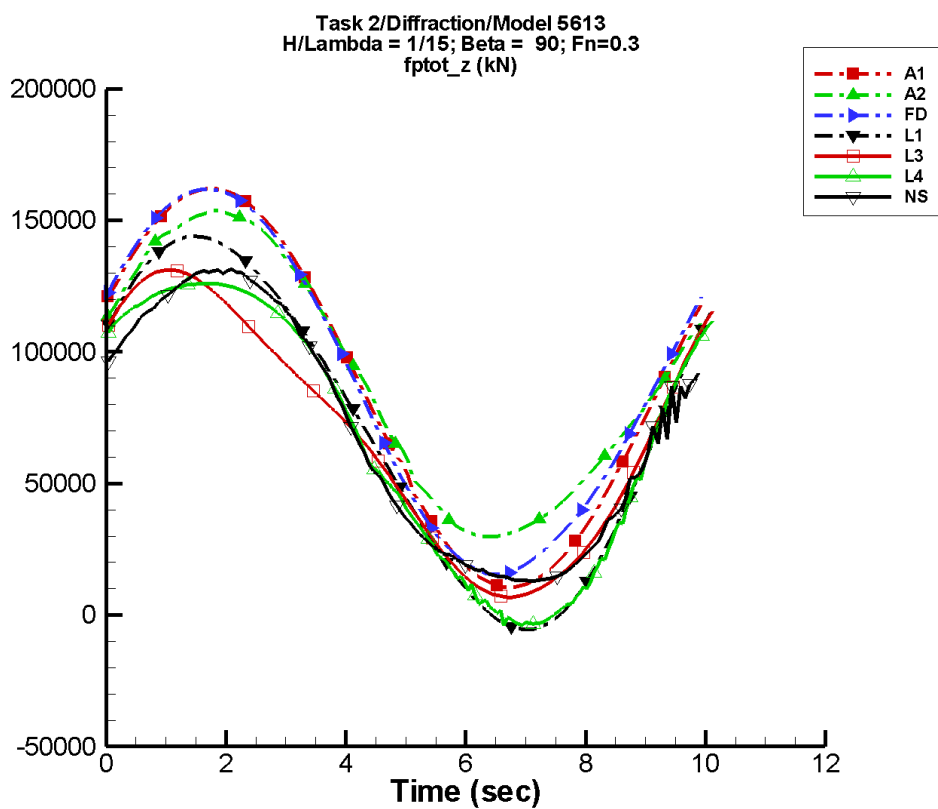
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	182.	283.	141	209.	-160
FD	-3.49E-06	2.38E-04	112	1.34E-04	-144
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–848. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-2.97E+03	4.00E+04	-471.	5.33E+03
FD	-5.94E-04	6.56E-04	-3.42E-04	4.54E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–425. Time history of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
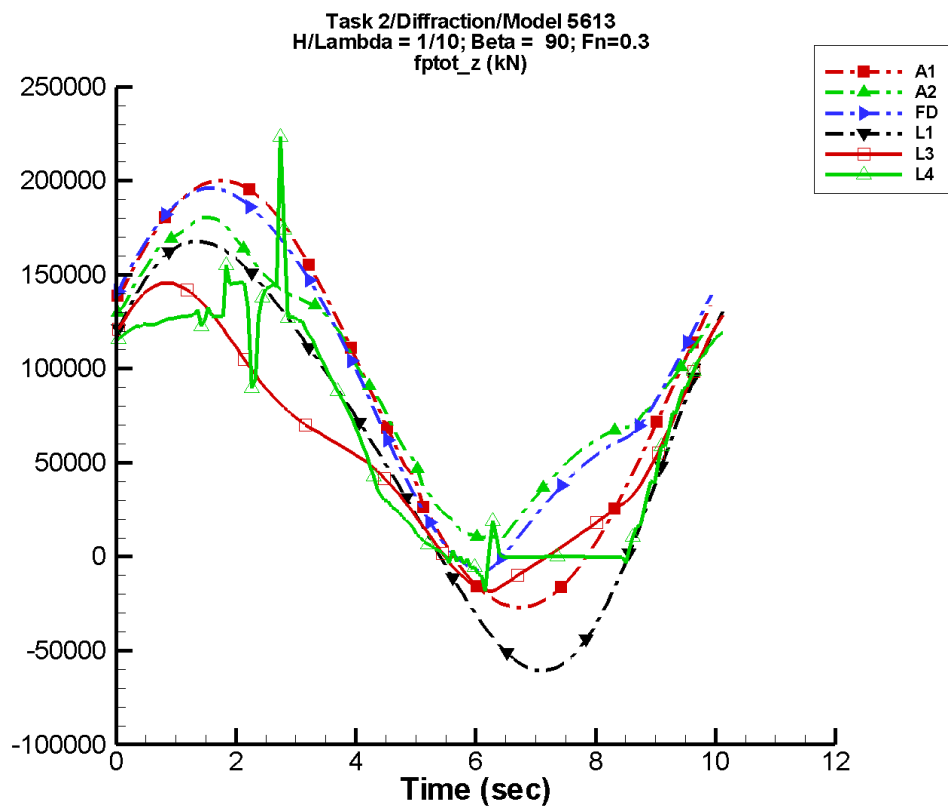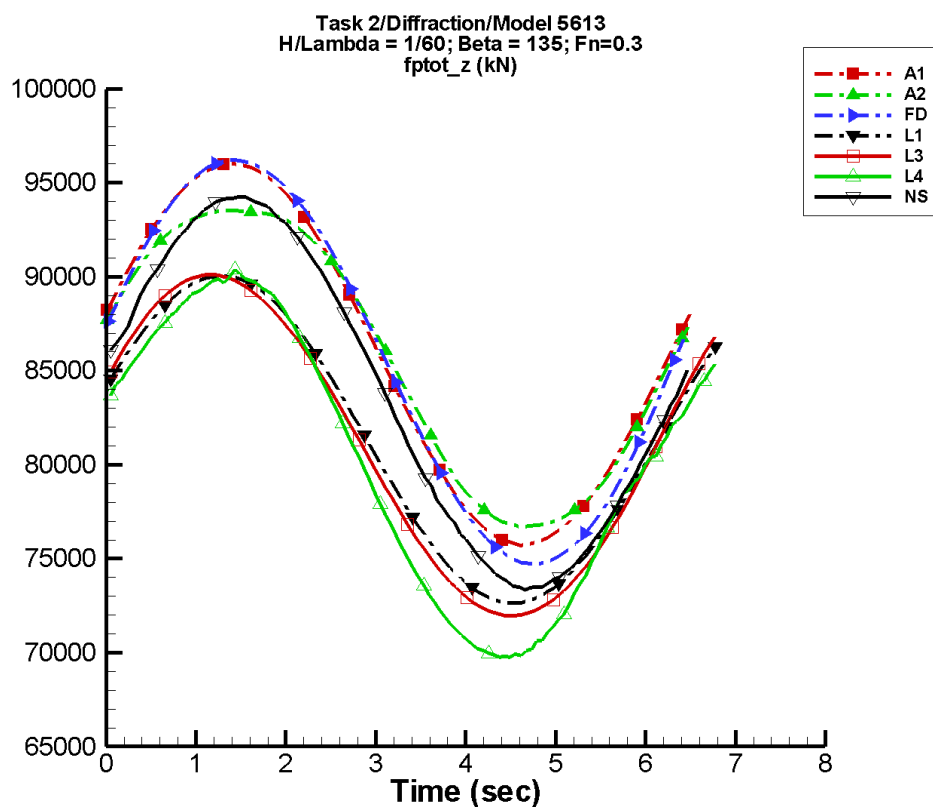
Table G–849. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	42.2	692.	5	1.00E+03	-83
FD	0.795	476.	-21	384.	-146
L1	—	—	—	—	—
L3	4.19	525.	-27	354.	-152
L4	4.19	525.	-27	354.	-152
NF	—	—	—	—	—
NS	3.56	244.	-36	243.	-158

Table G–850. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-1.65E+03	2.87E+03	-1.62E+03	2.77E+03
FD	-1.07E+03	858.	-1.00E+03	850.
L1	—	—	—	—
L3	-962.	870.	-947.	867.
L4	-962.	870.	-947.	867.
NF	—	—	—	—
NS	-414.	701.	-370.	655.

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–426. Time history of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–851. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	151.	3.64E+03	-29	2.59E+03	158
FD	-9.93	3.11E+03	-27	1.74E+03	153
L1	—	—	—	—	—
L3	33.8	3.35E+03	-28	1.70E+03	147
L4	33.8	3.35E+03	-28	1.70E+03	147
NF	—	—	—	—	—
NS	111.	1.74E+03	-44	1.09E+03	165

Table G–852. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
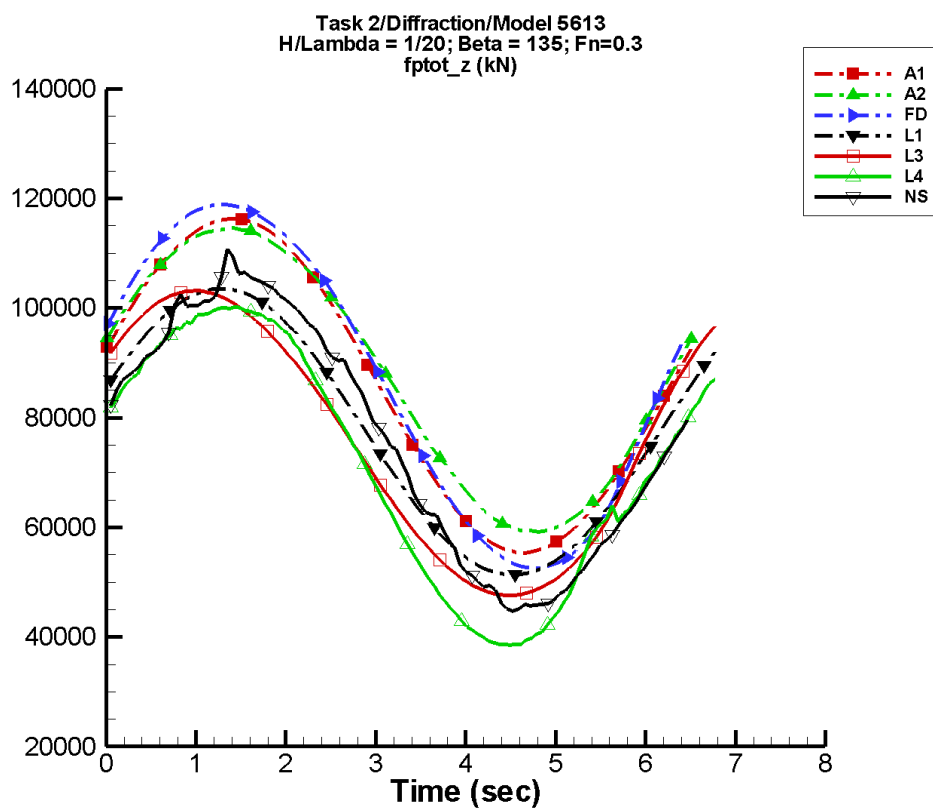
Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-1.61E+04	1.39E+04	-9.28E+03	7.42E+03
FD	-9.44E+03	4.36E+03	-8.49E+03	4.09E+03
L1	—	—	—	—
L3	-1.00E+04	4.27E+03	-9.64E+03	4.20E+03
L4	-1.00E+04	4.27E+03	-9.64E+03	4.20E+03
NF	—	—	—	—
NS	-2.80E+03	3.60E+03	-2.13E+03	2.95E+03

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–427. Time history of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
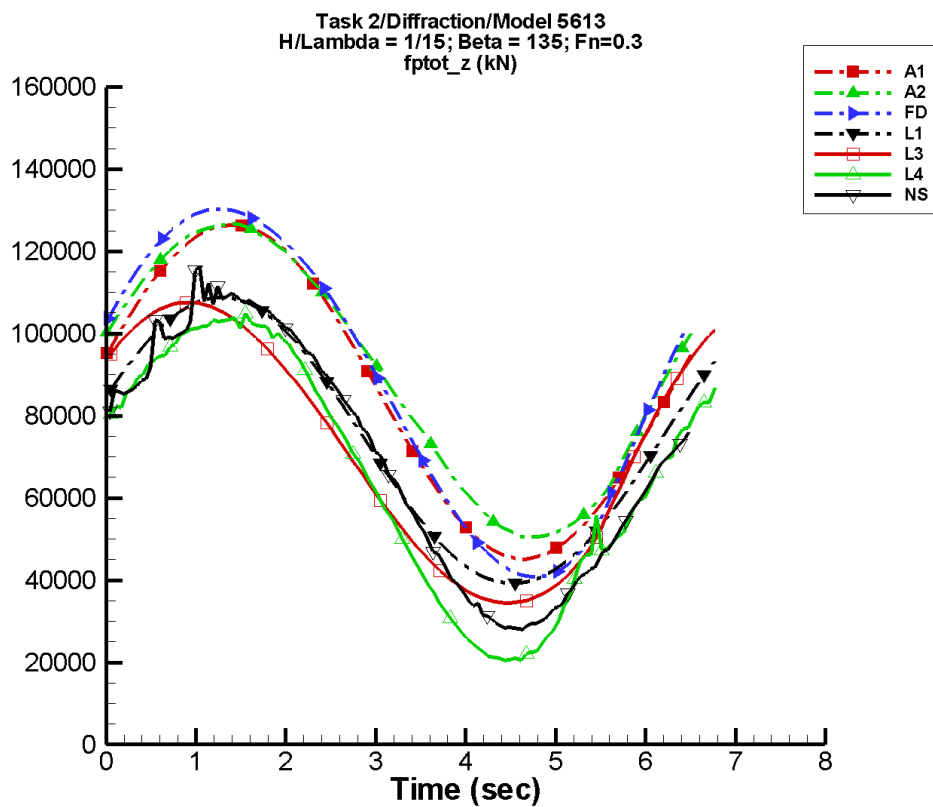
Table G–853. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-12.2	6.69E+03	-55	2.74E+03	85
FD	4.44	5.76E+03	-46	2.60E+03	68
L1	—	—	—	—	—
L3	-34.8	6.03E+03	-48	2.90E+03	55
L4	-34.8	6.03E+03	-48	2.90E+03	55
NF	—	—	—	—	—
NS	320.	2.95E+03	-45	1.54E+03	144

Table G–854. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.30E+04	1.14E+04	-1.23E+04	1.03E+04
FD	-1.23E+04	1.01E+04	-1.17E+04	1.00E+04
L1	—	—	—	—
L3	-1.27E+04	1.04E+04	-1.23E+04	1.02E+04
L4	-1.27E+04	1.04E+04	-1.23E+04	1.02E+04
NF	—	—	—	—
NS	-5.80E+03	6.11E+03	-4.55E+03	4.95E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 45; Fn=0.3
fhst_mx (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–428. Time history of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
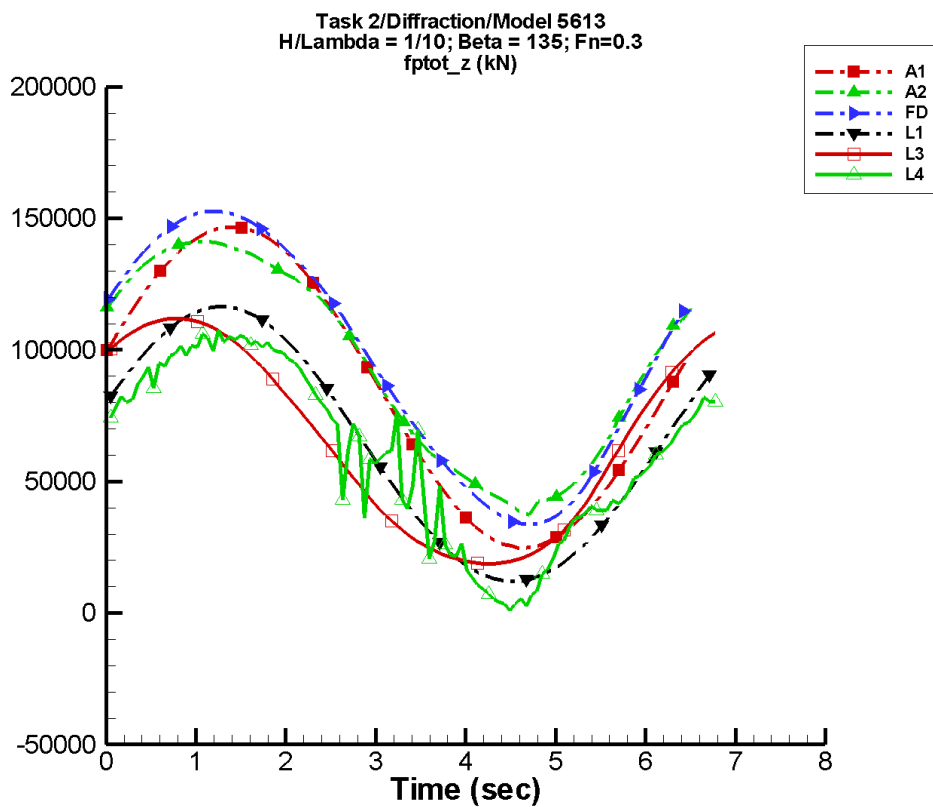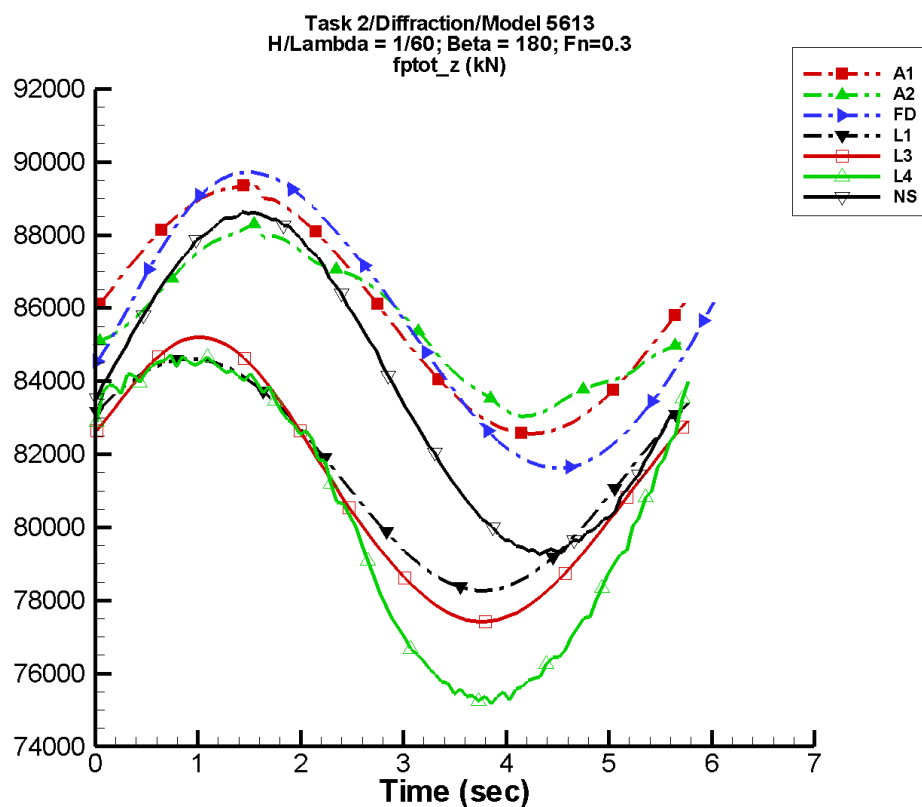
Table G–855. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	174.	7.01E+03	5	1.19E+04	5
FD	408.	6.66E+03	7	1.02E+04	21
L1	—	—	—	—	—
L3	114.	5.59E+03	2	8.87E+03	16
L4	114.	5.59E+03	2	8.87E+03	16
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–856. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-5.75E+04	2.72E+04	-2.31E+04	2.54E+04
FD	-2.16E+04	2.51E+04	-1.92E+04	2.37E+04
L1	—	—	—	—
L3	-1.52E+04	1.98E+04	-1.40E+04	1.92E+04
L4	-1.52E+04	1.98E+04	-1.40E+04	1.92E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–429. Time history of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–857. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$,
$F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	28.6	1.08E+03	-86	1.52E+03	-30
FD	23.0	1.24E+03	-100	785.	-18
L1	—	—	—	—	—
L3	7.53	1.36E+03	-95	745.	-5
L4	7.53	1.36E+03	-95	745.	-5
NF	—	—	—	—	—
NS	-6.86	742.	-97	446.	-1

Table G–858. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/60$,
$\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-3.97E+03	3.94E+03	-3.41E+03	3.42E+03
FD	-2.23E+03	2.23E+03	-2.13E+03	2.13E+03
L1	—	—	—	—
L3	-2.21E+03	2.21E+03	-2.18E+03	2.18E+03
L4	-2.21E+03	2.21E+03	-2.18E+03	2.18E+03
NF	—	—	—	—
NS	-1.27E+03	1.28E+03	-1.24E+03	1.25E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.3
fhst_mx (kN-m)

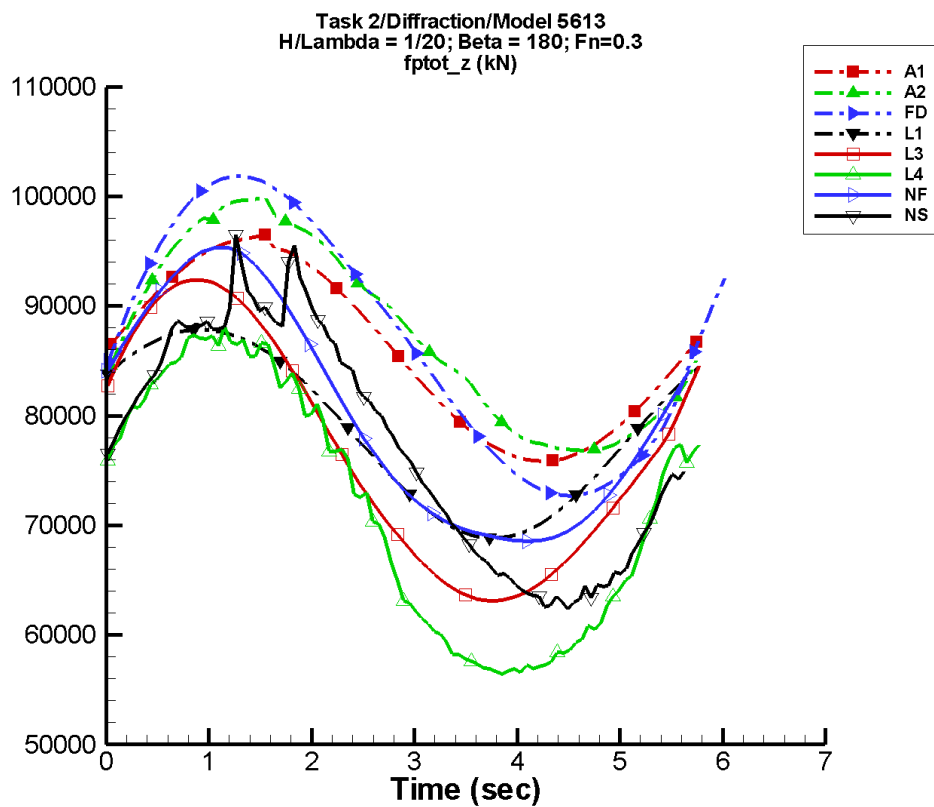Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–430. Time history of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–859. Coefficients of the Fourier fit $a_0+a_1\sin{(\omega t + \Phi_1)}+a_2\sin{(2\omega t + \Phi_2)}+$ $\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-139.	5.14E+03	-99	1.04E+04	-14
FD	12.7	4.98E+03	-99	1.15E+04	-17
L1	—	—	—	—	—
L3	-80.2	5.27E+03	-95	1.10E+04	-9
L4	-80.2	5.27E+03	-95	1.10E+04	-9
NF	—	—	—	—	—
NS	333.	3.79E+03	-99	8.04E+03	-10

Table G–860. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-2.74E+04	2.63E+04	-1.63E+04	1.55E+04
FD	-1.53E+04	1.53E+04	-1.47E+04	1.47E+04
L1	—	—	—	—
L3	-1.50E+04	1.50E+04	-1.47E+04	1.47E+04
L4	-1.50E+04	1.50E+04	-1.47E+04	1.47E+04
NF	—	—	—	—
NS	-1.05E+04	1.23E+04	-9.47E+03	1.18E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

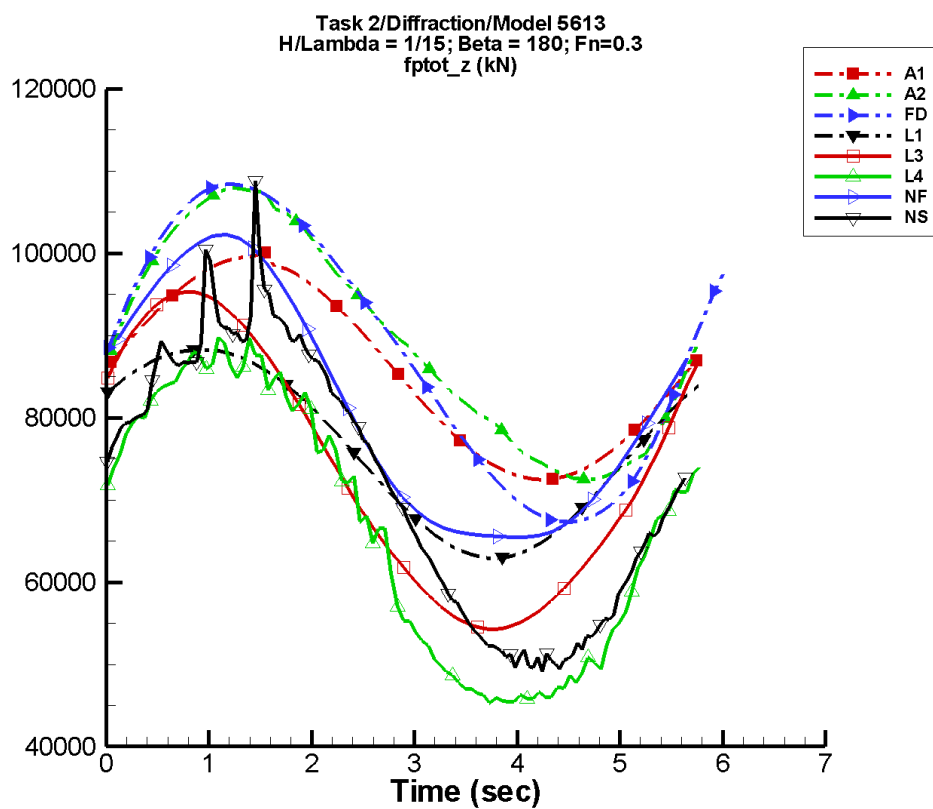Figure G–431. Time history of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
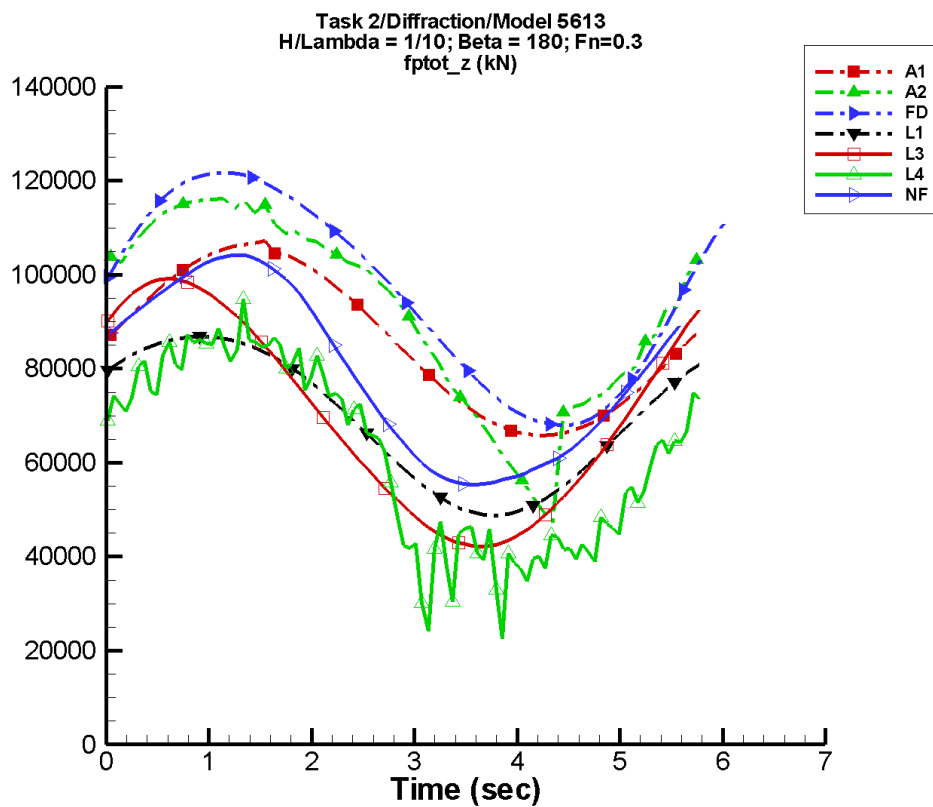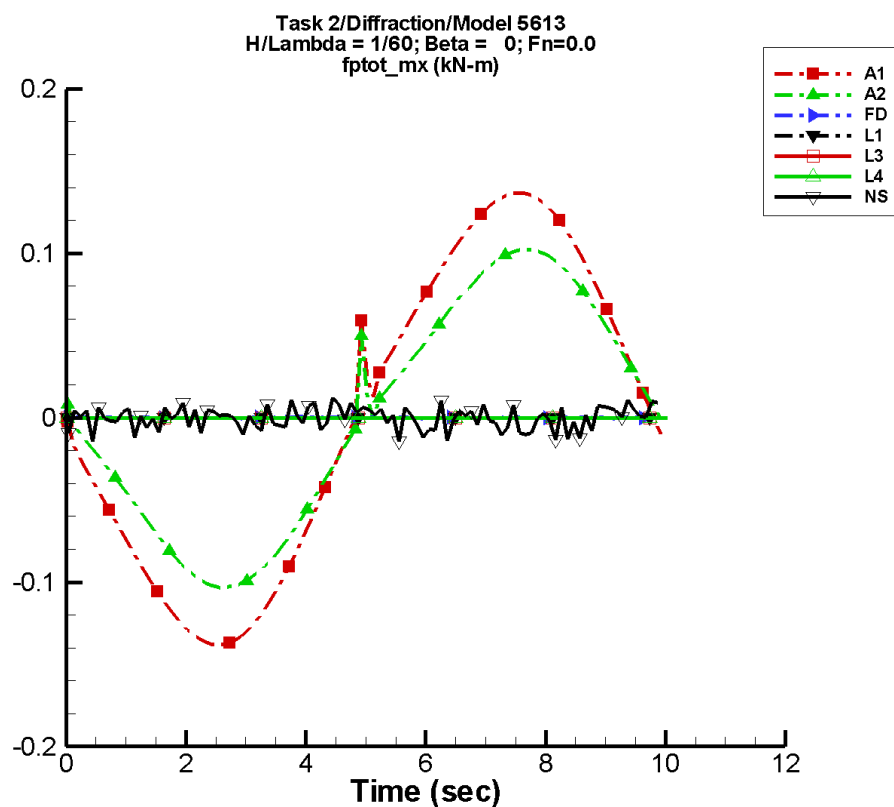
Table G–861. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	142.	9.08E+03	-101	2.61E+04	-16
FD	66.5	7.79E+03	-102	2.90E+04	-18
L1	—	—	—	—	—
L3	-290.	8.47E+03	-95	2.87E+04	-9
L4	-290.	8.47E+03	-95	2.87E+04	-9
NF	—	—	—	—	—
NS	579.	5.19E+03	-101	1.90E+04	-9

Table G–862. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-4.04E+04	4.05E+04	-3.71E+04	3.75E+04
FD	-3.96E+04	3.96E+04	-3.68E+04	3.70E+04
L1	—	—	—	—
L3	-3.99E+04	3.99E+04	-3.89E+04	3.89E+04
L4	-3.99E+04	3.99E+04	-3.89E+04	3.89E+04
NF	—	—	—	—
NS	-2.35E+04	2.78E+04	-2.18E+04	2.65E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.3
fhst_mx (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–432. Time history of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–863. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
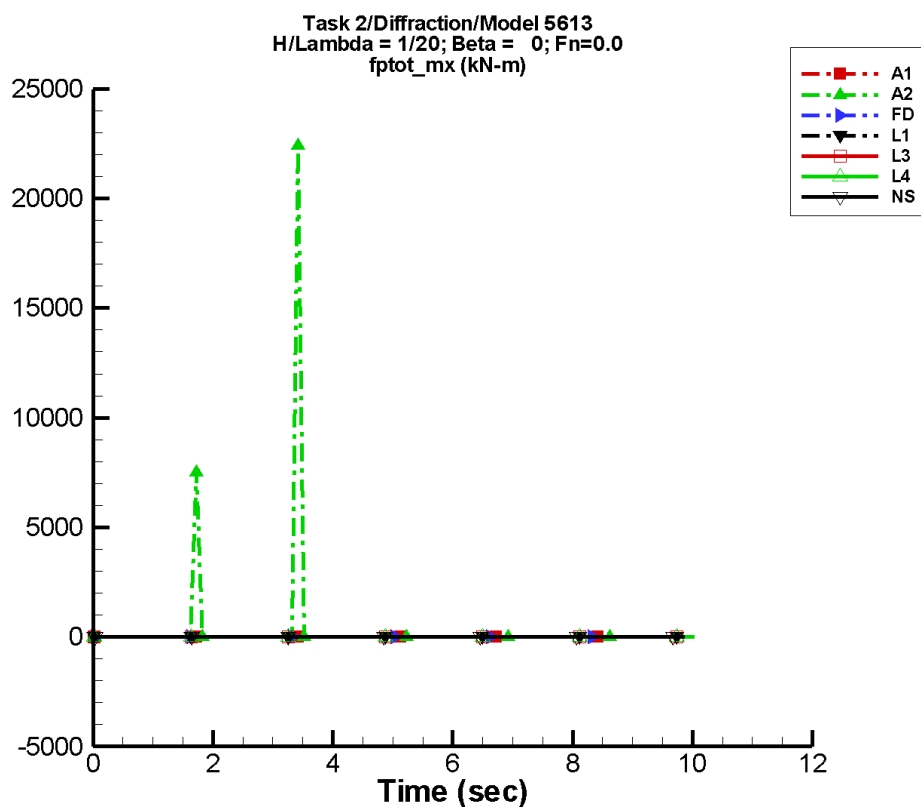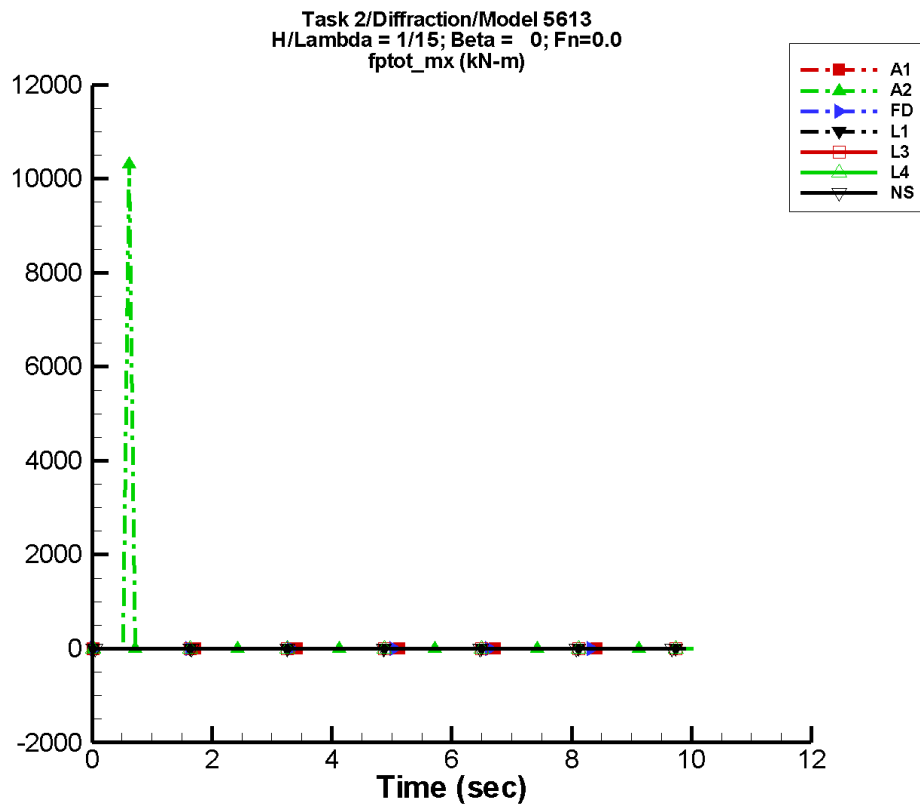
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-156.	3.70E+03	64	5.32E+04	-17
FD	-770.	3.37E+03	39	5.26E+04	-12
L1	—	—	—	—	—
L3	226.	3.22E+03	65	5.54E+04	-9
L4	226.	3.22E+03	65	5.54E+04	-9
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–864. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-9.96E+04	1.01E+05	-7.52E+04	7.57E+04
FD	-9.20E+04	9.37E+04	-7.11E+04	7.14E+04
L1	—	—	—	—
L3	-9.49E+04	9.49E+04	-8.73E+04	8.75E+04
L4	-9.49E+04	9.49E+04	-8.73E+04	8.75E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.3
fhst_mx (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–433. Time history of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
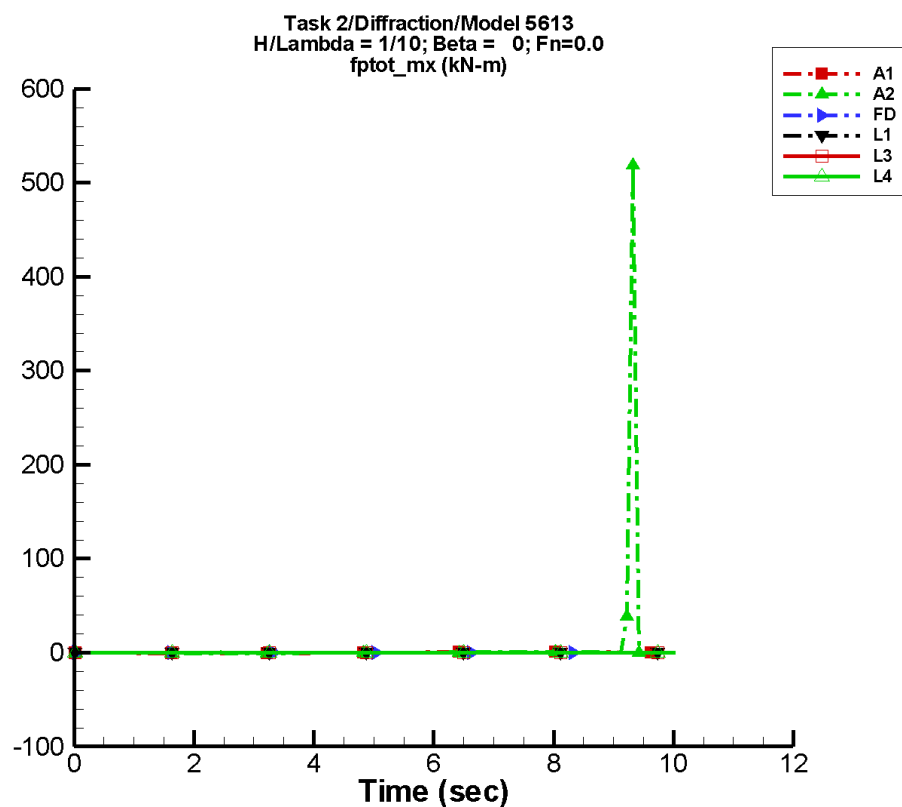
Table G–865. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$,
$F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	32.3	408.	171	567.	66
FD	-8.02	499.	-149	405.	160
L1	—	—	—	—	—
L3	-5.31	537.	-152	363.	150
L4	-5.31	537.	-152	363.	150
NF	—	—	—	—	—
NS	-3.36	363.	-124	206.	167

Table G–866. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/60$,
$\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(kN-m)	(kN-m)	(kN-m)	(kN-m)
A1	—	—	—	—
A2	-2.87E+03	1.63E+03	-2.05E+03	1.50E+03
FD	-847.	1.04E+03	-820.	697.
L1	—	—	—	—
L3	-870.	960.	-858.	801.
L4	-870.	960.	-858.	801.
NF	—	—	—	—
NS	-670.	410.	-649.	403.

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 135; Fn=0.3
fhst_mx (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–434. Time history of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
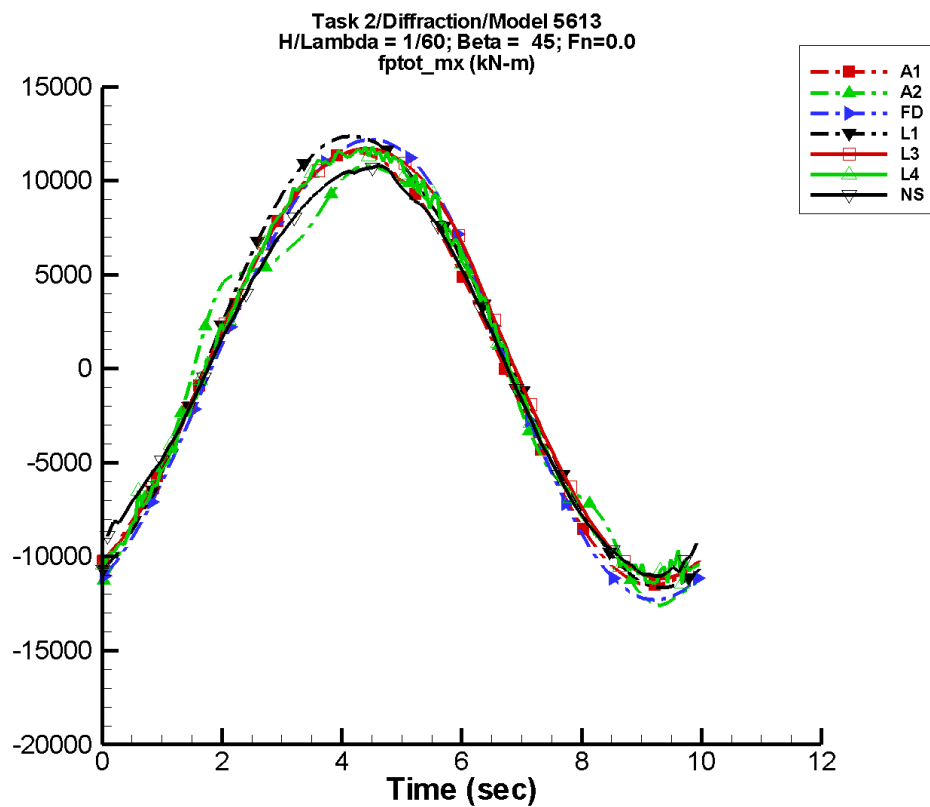
Table G–867. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	134.	3.43E+03	-155	2.67E+03	-170
FD	40.7	3.02E+03	-145	1.85E+03	-137
L1	—	—	—	—	—
L3	-8.78	3.23E+03	-154	1.68E+03	-146
L4	-8.78	3.23E+03	-154	1.68E+03	-146
NF	—	—	—	—	—
NS	281.	2.52E+03	-156	1.79E+03	-145

Table G–868. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered		Filtered	
	Minimum (kN-m)	Maximum (kN-m)	Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-6.33E+03	1.07E+04	-5.27E+03	5.97E+03
FD	-4.37E+03	9.43E+03	-4.08E+03	5.27E+03
L1	—	—	—	—
L3	-4.26E+03	9.92E+03	-4.13E+03	7.35E+03
L4	-4.26E+03	9.92E+03	-4.13E+03	7.35E+03
NF	—	—	—	—
NS	-4.29E+03	8.75E+03	-3.40E+03	6.67E+03

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–435. Time history of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

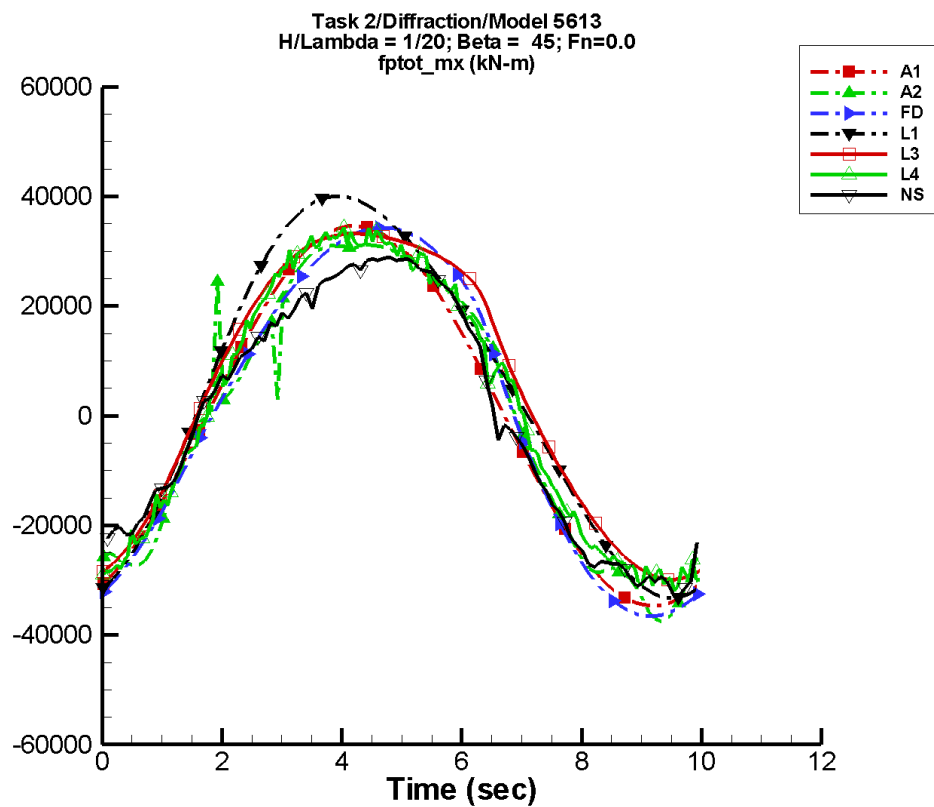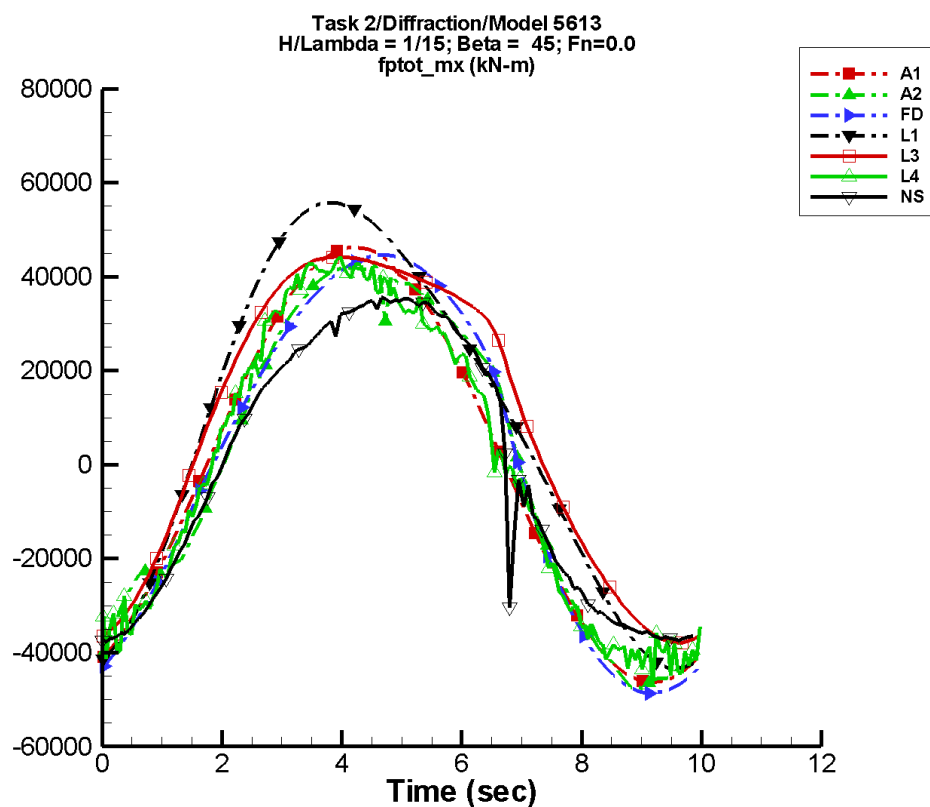Table G–869. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	158.	6.54E+03	-138	2.27E+03	-99
FD	97.6	5.45E+03	-129	2.69E+03	-51
L1	—	—	—	—	—
L3	71.9	5.84E+03	-136	2.81E+03	-56
L4	71.9	5.84E+03	-136	2.81E+03	-56
NF	—	—	—	—	—
NS	622.	4.82E+03	-144	3.24E+03	-57

Table G–870. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.14E+04	1.26E+04	-7.14E+03	8.88E+03
FD	-9.88E+03	1.22E+04	-7.45E+03	7.90E+03
L1	—	—	—	—
L3	-1.01E+04	1.27E+04	-9.25E+03	9.64E+03
L4	-1.01E+04	1.27E+04	-9.25E+03	9.64E+03
NF	—	—	—	—
NS	-9.31E+03	1.25E+04	-7.76E+03	1.04E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–436. Time history of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
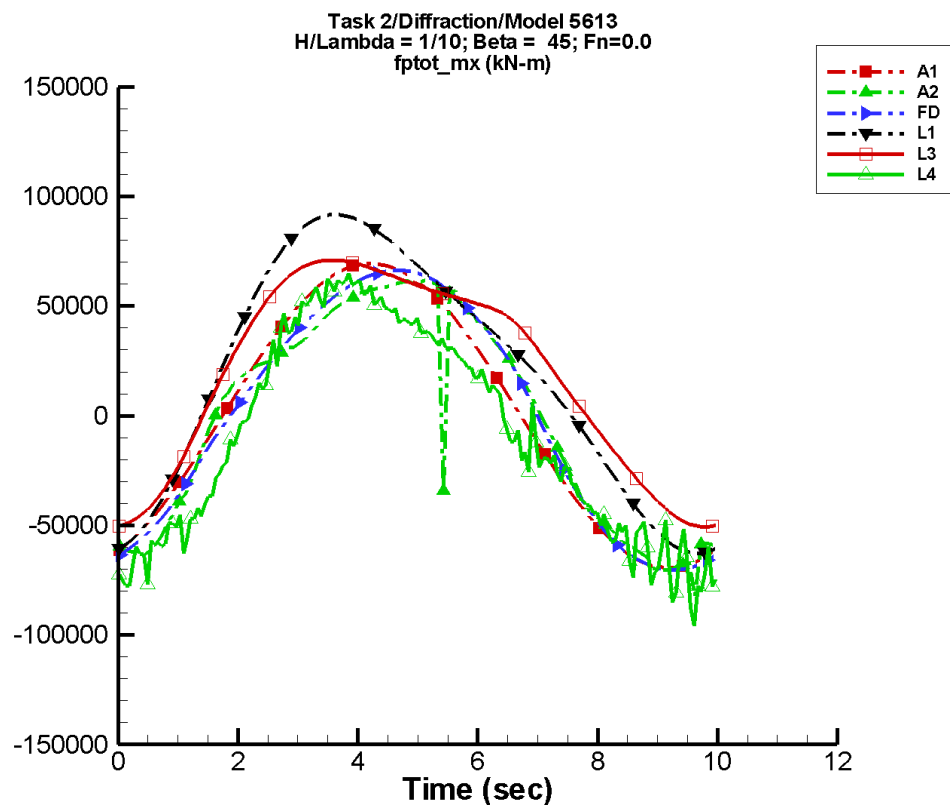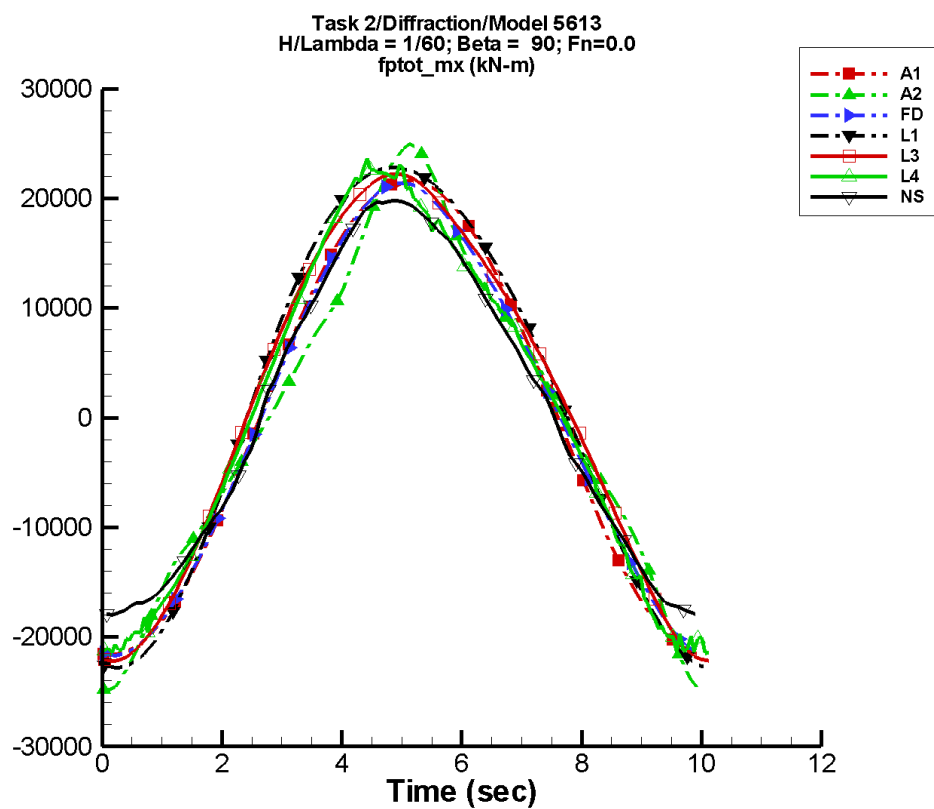
Table G–871. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-83.9	7.47E+03	175	1.07E+04	-17
FD	-192.	7.40E+03	-175	9.45E+03	0
L1	—	—	—	—	—
L3	74.1	5.68E+03	-177	7.48E+03	-15
L4	74.1	5.68E+03	-177	7.48E+03	-15
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–872. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-2.54E+04	2.12E+04	-1.97E+04	1.65E+04
FD	-2.51E+04	1.96E+04	-1.90E+04	1.56E+04
L1	—	—	—	—
L3	-1.97E+04	1.44E+04	-1.67E+04	1.26E+04
L4	-1.97E+04	1.44E+04	-1.67E+04	1.26E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 180; Fn=0.3
fhst_mx (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–437. Time history of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–873. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	9.71E-05	1.70E-04	25	2.45E-04	-103
FD	-1.34E-04	1.47E-03	-179	3.21E-03	86
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.93E-04	1.00E-03	-22	4.98E-04	-104

Table G–874. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
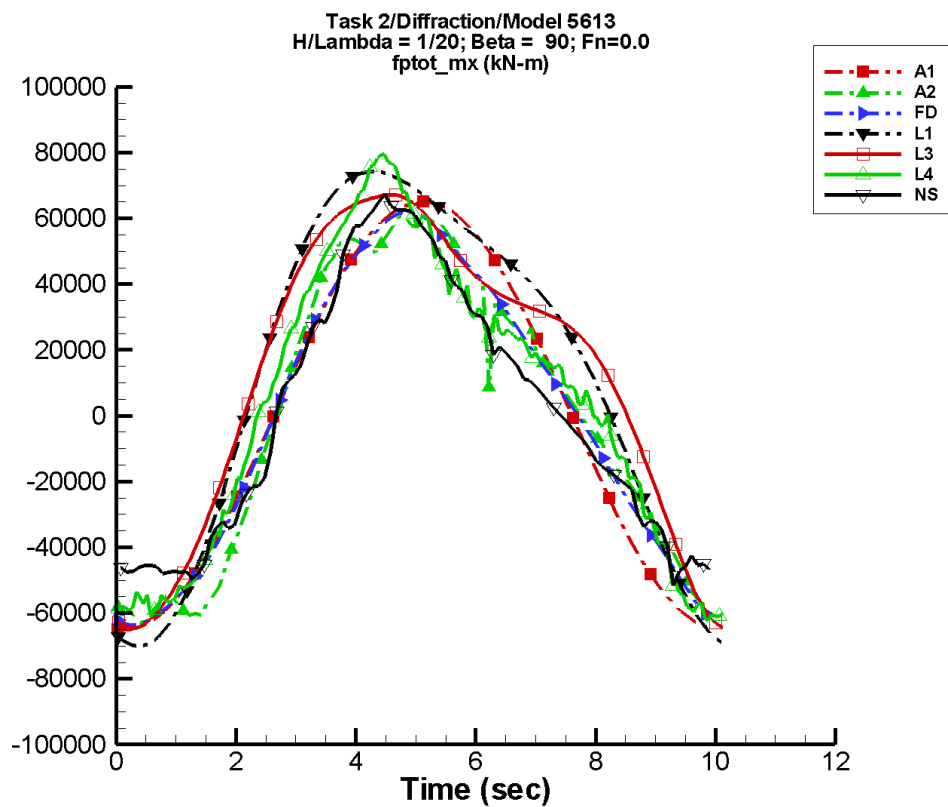
Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-7.61E-04	1.82E-03	-1.55E-04	6.79E-04
FD	-2.27E-02	1.51E-02	-1.26E-02	8.74E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-9.02E-03	1.13E-02	-2.17E-03	3.85E-03

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–438. Time history of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
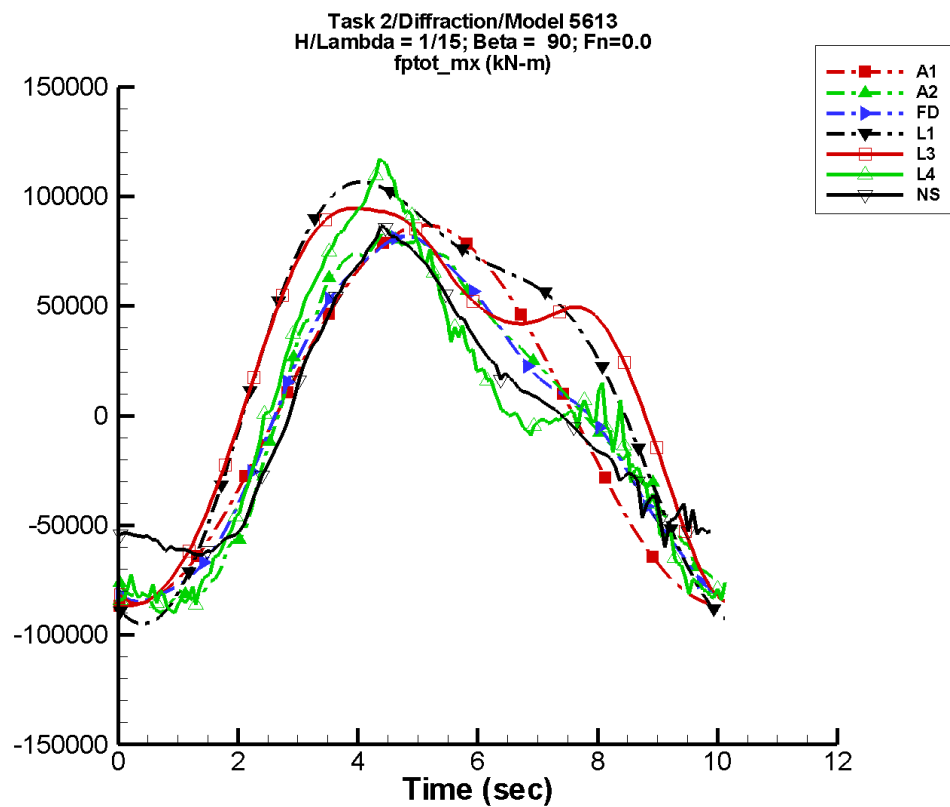
Table G–875. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	104.	232.	14	296.	-60
FD	3.37E-04	1.90E-03	-31	2.89E-03	-136
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-8.14E-05	1.21E-03	133	1.21E-03	146

Table G–876. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.58E-03	1.33E+04	-152.	1.77E+03
FD	-2.50E-02	2.55E-02	-4.38E-03	5.61E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.07E-02	1.32E-02	-2.29E-03	5.06E-03

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–439. Time history of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
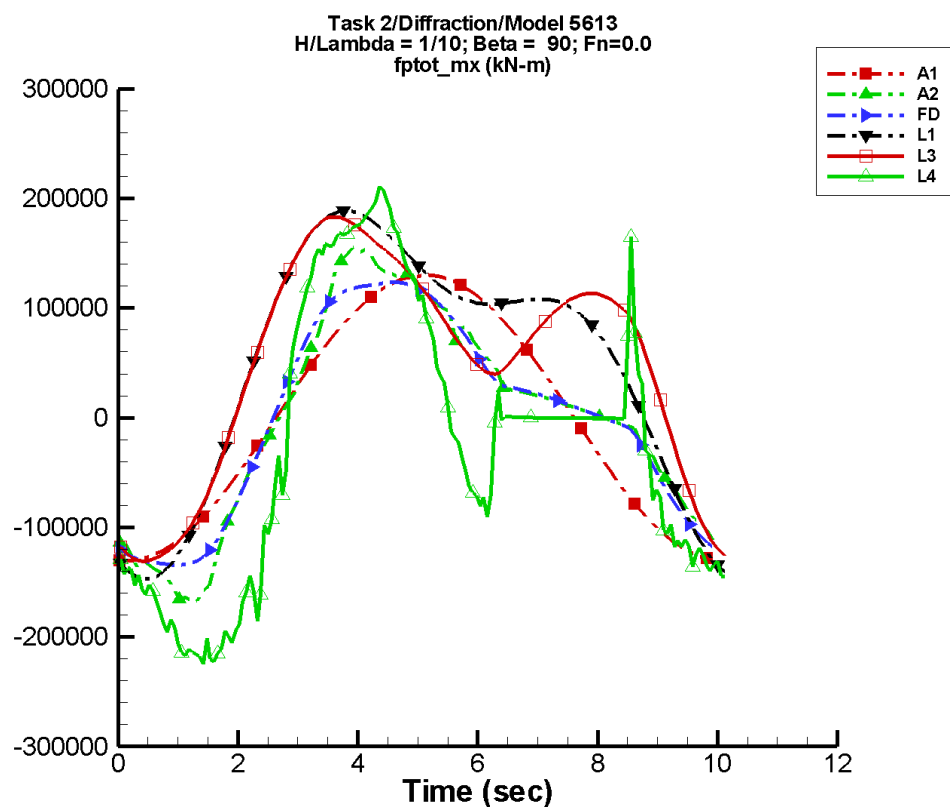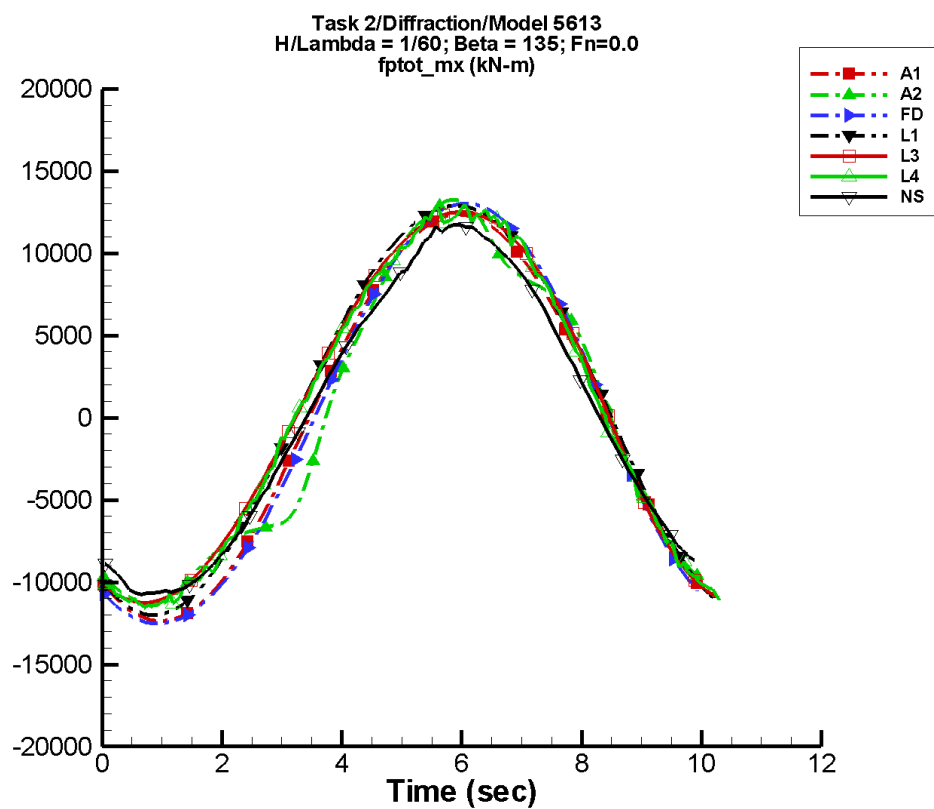
Table G–877. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	51.1	92.7	106	94.6	133
FD	-2.44E-03	4.82E-03	106	6.30E-03	-53
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-8.03E-04	1.67E-03	37	1.48E-03	-95

Table G–878. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-7.36E-03	2.68E+03	-30.4	357.
FD	-8.97E-02	4.75E-02	-2.37E-02	9.83E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.59E-02	1.38E-02	-6.33E-03	4.09E-03

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–440. Time history of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–879. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-2.39	30.9	5	49.4	152
FD	7.76E-03	3.10E-02	80	3.51E-02	100
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–880. Minimum and maximum of of M_x^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

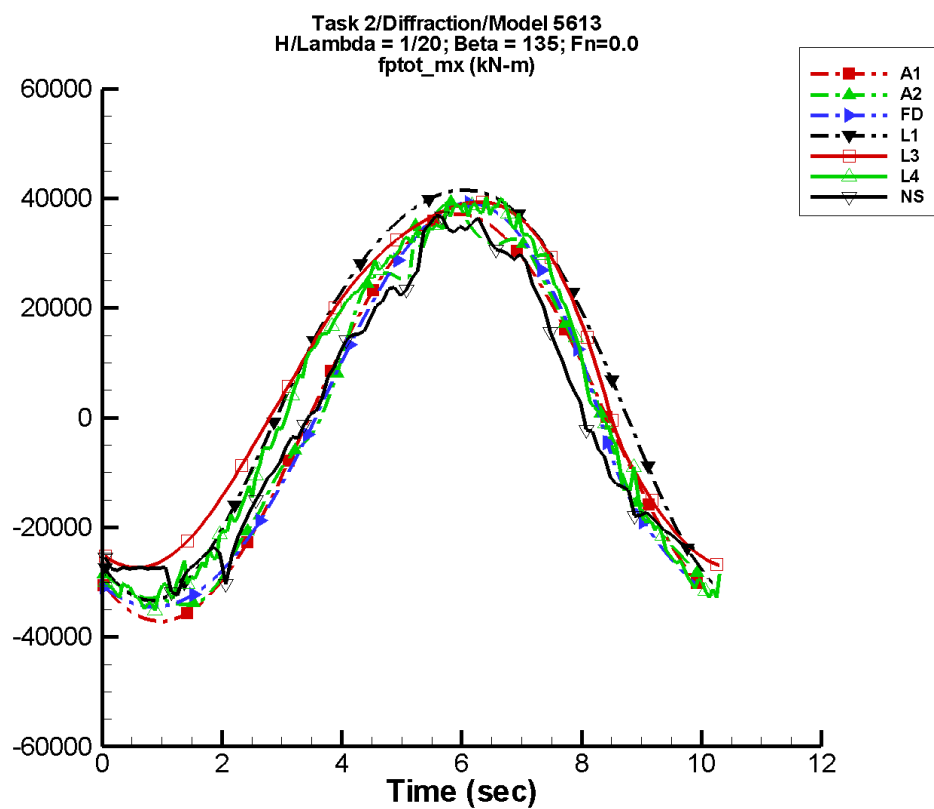| Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-1.12E+03	912.	-156.	131.
FD	-0.173	0.264	-6.28E-02	0.130
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–441. Time history of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–881. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
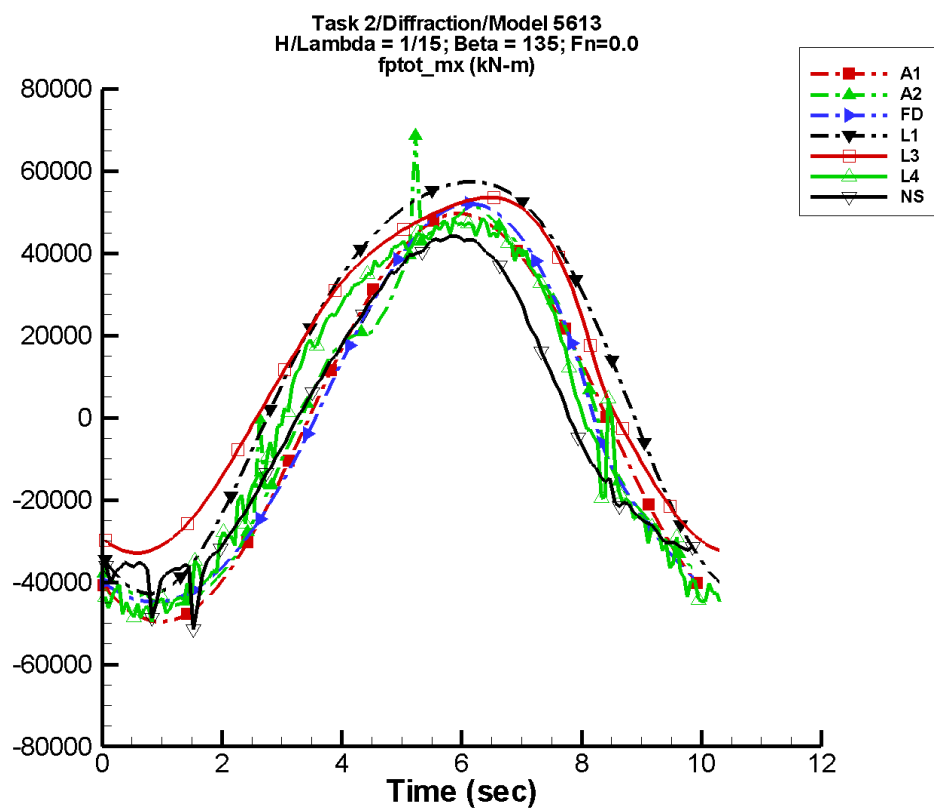
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-2.64E+03	5.22E+04	115	2.44E+04	39
FD	-1.71E+04	4.21E+04	132	2.01E+04	22
L1	—	—	—	—	—
L3	-2.19E+04	4.33E+04	136	1.94E+04	30
L4	-2.19E+04	4.33E+04	136	1.94E+04	30
NF	—	—	—	—	—
NS	-7.53E+04	1.47E+04	92	3.78E+03	-16

Table G–882. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-7.90E+04	6.40E+04	-7.65E+04	6.10E+04
FD	-8.40E+04	1.73E+04	-8.26E+04	1.74E+04
L1	—	—	—	—
L3	-8.96E+04	1.26E+04	-8.91E+04	1.25E+04
L4	-8.96E+04	1.26E+04	-8.91E+04	1.25E+04
NF	—	—	—	—
NS	-9.43E+04	-6.11E+04	-9.37E+04	-6.14E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–442. Time history of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
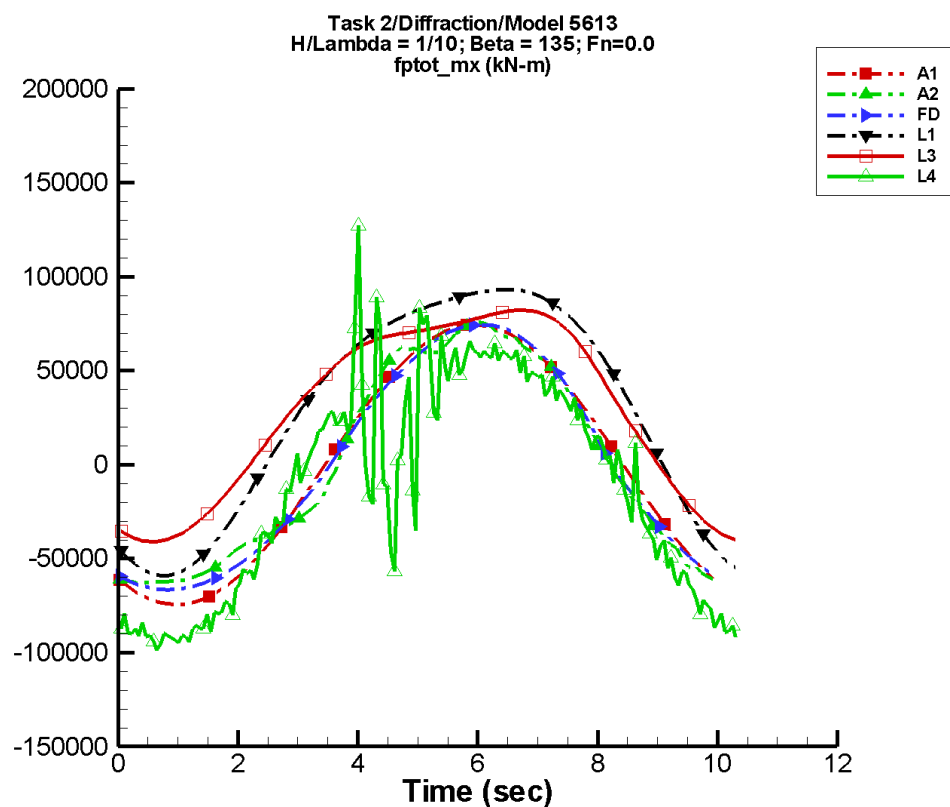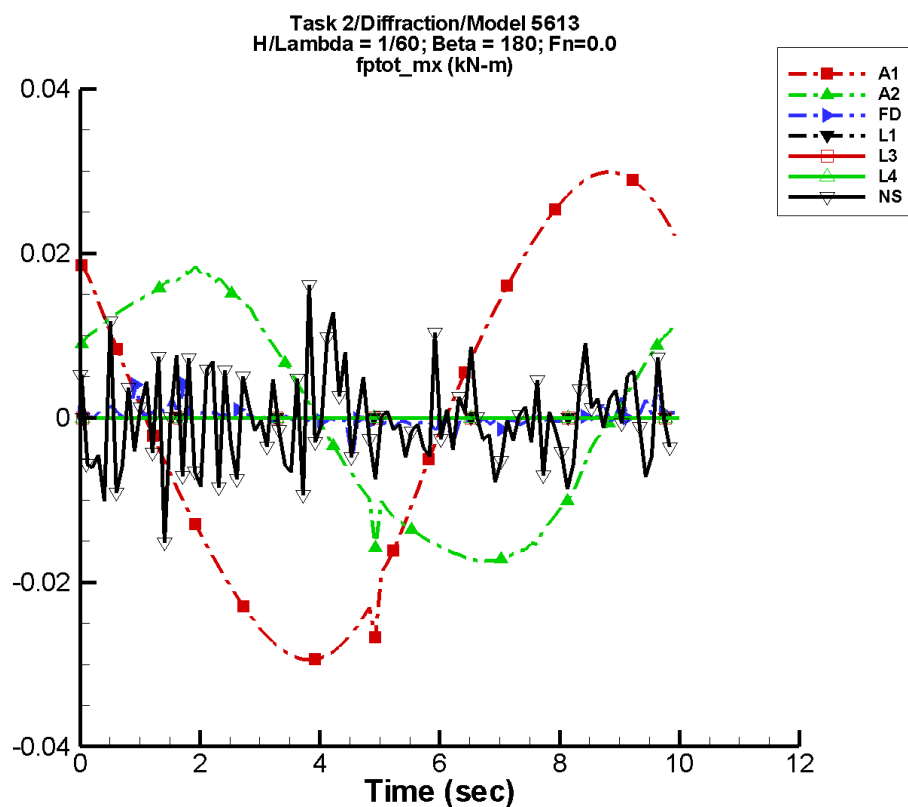
Table G–883. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-8.78E+04	3.27E+05	102	8.87E+04	-42
FD	-1.08E+05	3.14E+05	102	8.96E+04	-49
L1	—	—	—	—	—
L3	-1.11E+05	3.17E+05	106	8.87E+04	-42
L4	-1.11E+05	3.17E+05	106	8.87E+04	-42
NF	—	—	—	—	—
NS	-1.60E+05	2.82E+05	98	8.65E+04	-43

Table G–884. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-5.84E+05	2.05E+05	-5.66E+05	2.00E+05
FD	-5.85E+05	1.62E+05	-5.68E+05	1.61E+05
L1	—	—	—	—
L3	-5.92E+05	1.61E+05	-5.86E+05	1.61E+05
L4	-5.92E+05	1.61E+05	-5.86E+05	1.61E+05
NF	—	—	—	—
NS	-5.98E+05	8.19E+04	-5.88E+05	8.05E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–443. Time history of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–885. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-1.23E+05	6.32E+05	91	6.25E+04	-78
FD	-1.37E+05	6.06E+05	92	5.97E+04	-99
L1	—	—	—	—	—
L3	-1.40E+05	6.12E+05	96	5.57E+04	-93
L4	-1.40E+05	6.12E+05	96	5.57E+04	-93
NF	—	—	—	—	—
NS	-2.74E+05	5.25E+05	84	5.36E+04	-99

Table G–886. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

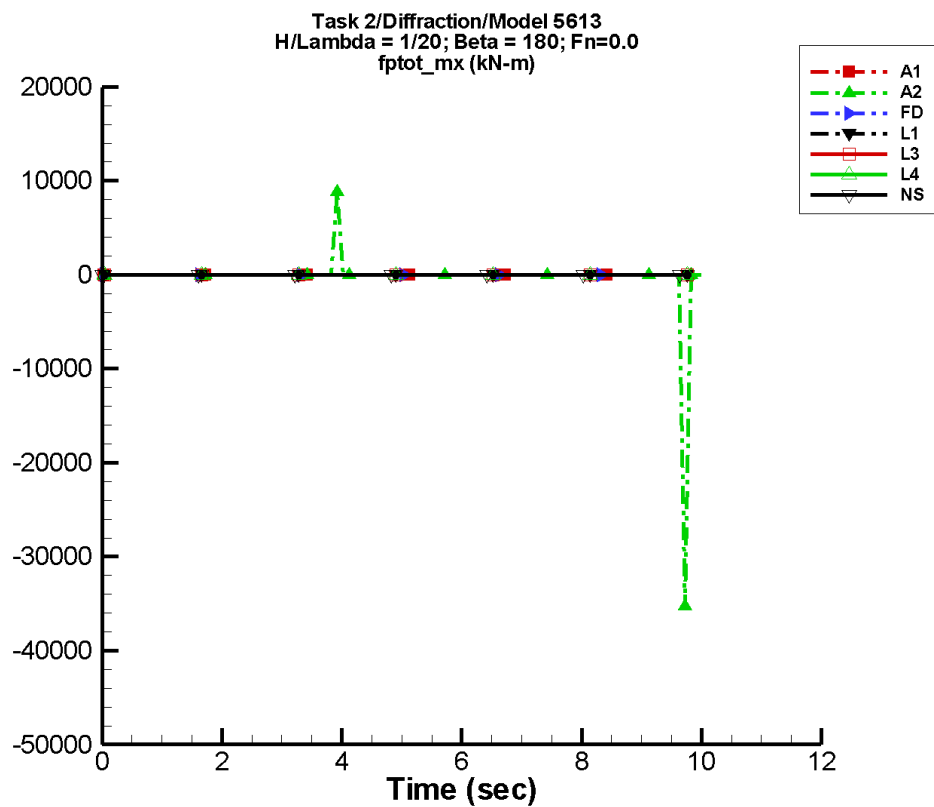| Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-8.72E+05	4.96E+05	-8.60E+05	4.56E+05
FD	-8.87E+05	4.14E+05	-8.65E+05	4.14E+05
L1	—	—	—	—
L3	-8.95E+05	4.20E+05	-8.85E+05	4.20E+05
L4	-8.95E+05	4.20E+05	-8.85E+05	4.20E+05
NF	—	—	—	—
NS	-9.91E+05	2.14E+05	-9.58E+05	2.11E+05

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–444. Time history of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
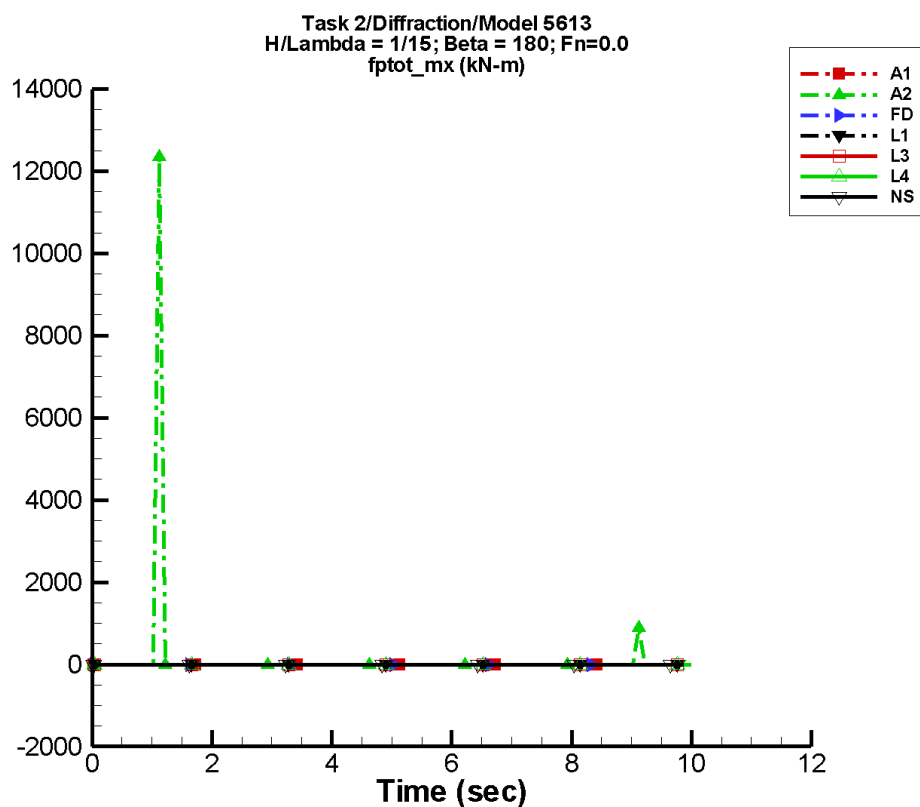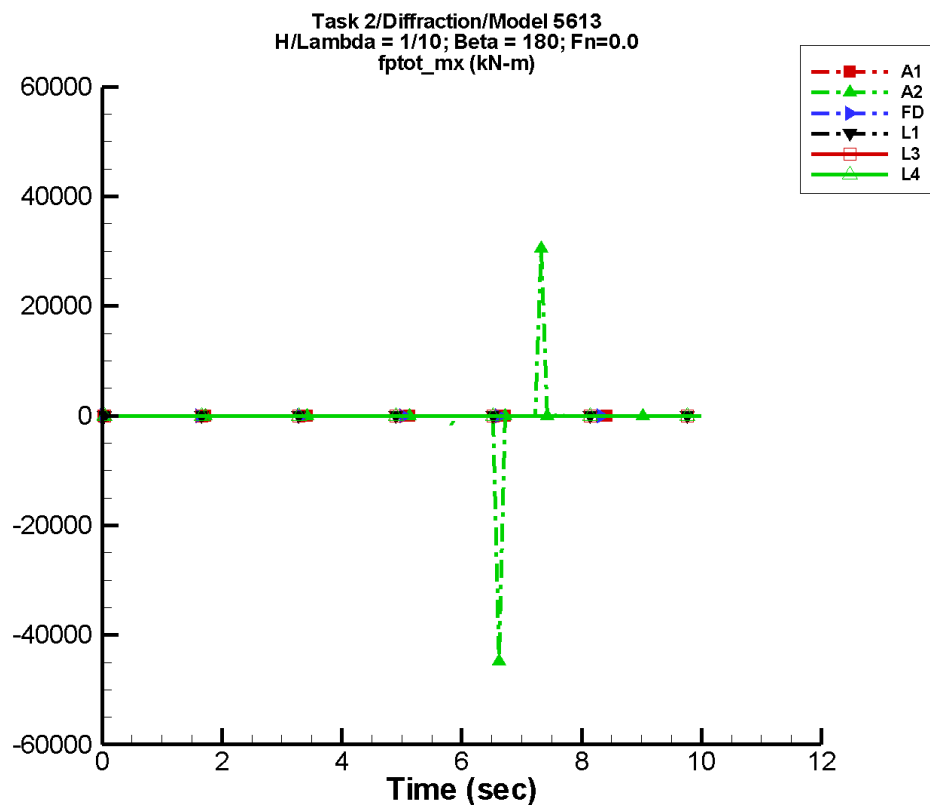
Table G–887. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	3.04E+05	1.65E+06	100	5.73E+05	177
FD	1.71E+05	1.46E+06	95	3.84E+05	166
L1	—	—	—	—	—
L3	1.66E+05	1.45E+06	99	3.81E+05	174
L4	1.66E+05	1.45E+06	99	3.81E+05	174
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–888. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-1.30E+06	2.42E+06	-1.27E+06	2.40E+06
FD	-1.24E+06	2.10E+06	-1.22E+06	2.02E+06
L1	—	—	—	—
L3	-1.25E+06	2.07E+06	-1.24E+06	1.99E+06
L4	-1.25E+06	2.07E+06	-1.24E+06	1.99E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–445. Time history of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
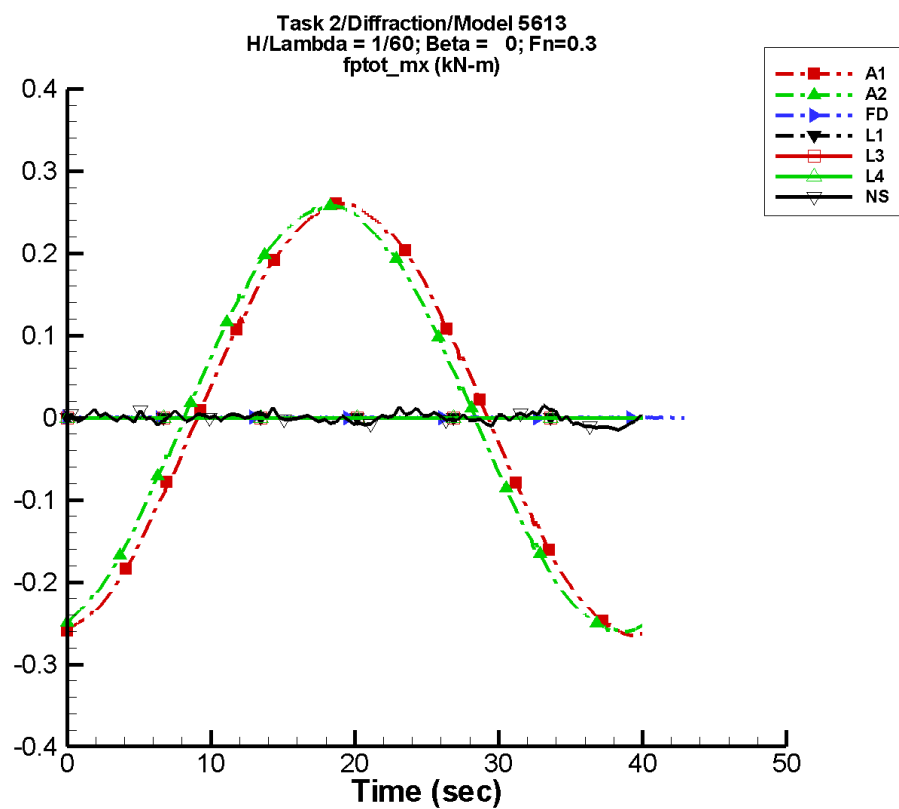
Table G–889. Coefficients of the Fourier fit $a_0 + a_1 \sin{(\omega t + \Phi_1)} + a_2 \sin{(2\omega t + \Phi_2)} +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-3.13E+03	7.44E+04	93	1.13E+04	-83
FD	-1.70E+04	5.11E+04	97	1.88E+04	-72
L1	—	—	—	—	—
L3	-2.17E+04	5.21E+04	101	1.89E+04	-66
L4	-2.17E+04	5.21E+04	101	1.89E+04	-66
NF	—	—	—	—	—
NS	-7.51E+04	1.57E+04	86	2.12E+03	-115

Table G–890. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-1.09E+05	7.14E+04	-1.06E+05	7.15E+04
FD	-9.15E+04	2.26E+04	-9.00E+04	2.24E+04
L1	—	—	—	—
L3	-9.70E+04	1.86E+04	-9.64E+04	1.85E+04
L4	-9.70E+04	1.86E+04	-9.64E+04	1.85E+04
NF	—	—	—	—
NS	-9.56E+04	-6.00E+04	-9.50E+04	-6.00E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–446. Time history of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–891. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
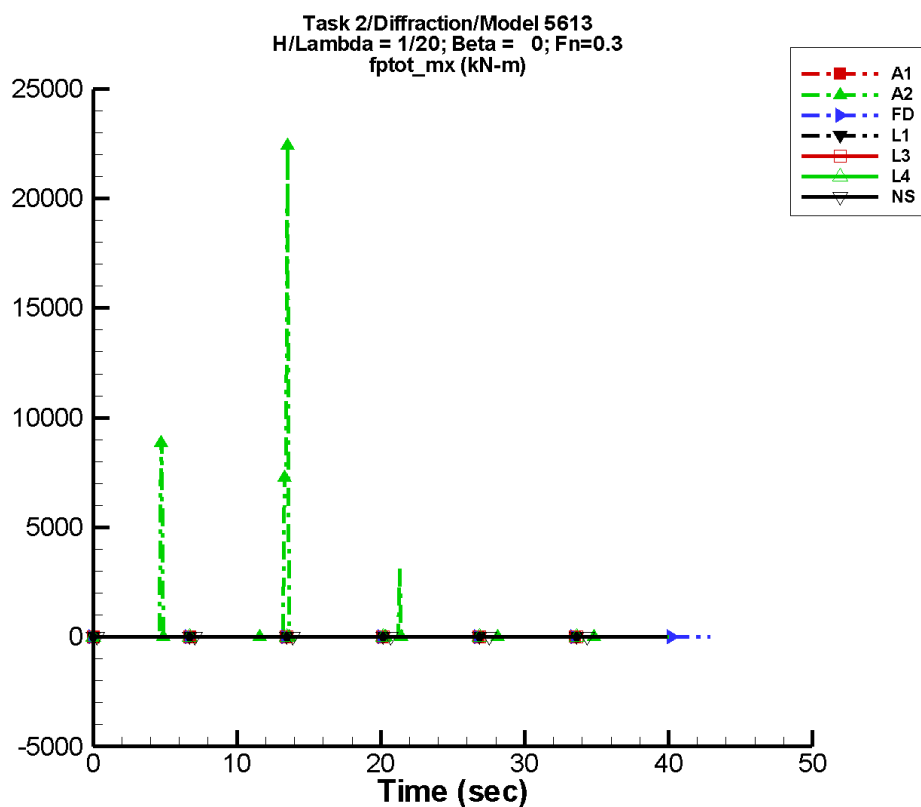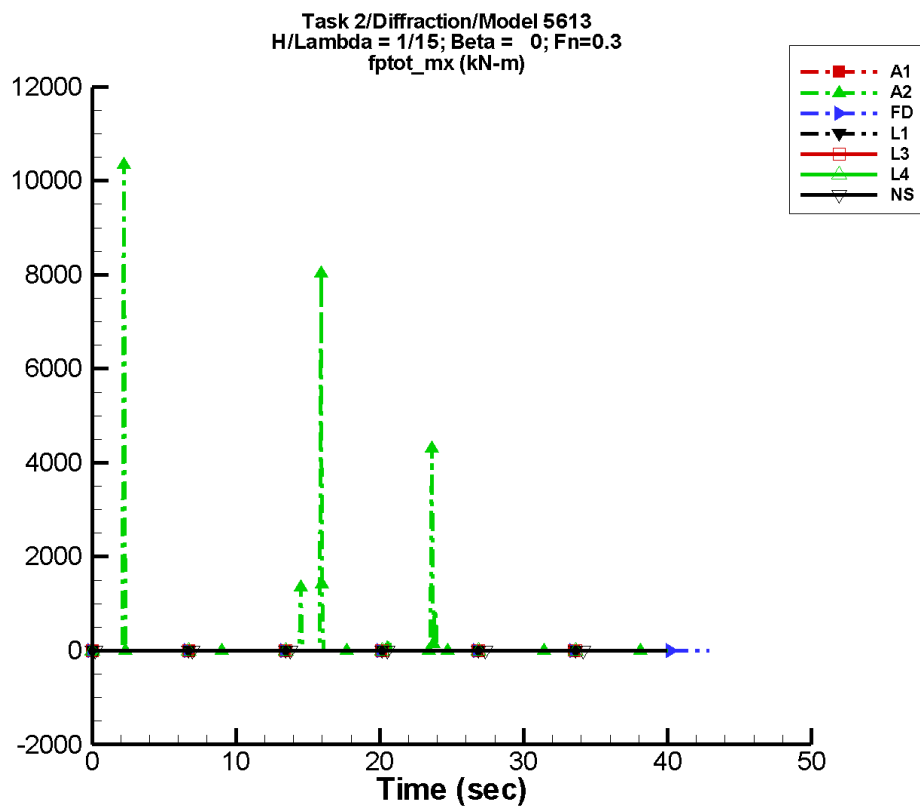
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-8.48E+04	3.87E+05	81	8.30E+04	-139
FD	-1.03E+05	3.72E+05	83	1.00E+05	-140
L1	—	—	—	—	—
L3	-1.08E+05	3.77E+05	87	9.53E+04	-136
L4	-1.08E+05	3.77E+05	87	9.53E+04	-136
NF	—	—	—	—	—
NS	-1.54E+05	2.95E+05	83	8.52E+04	-132

Table G–892. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-6.05E+05	2.47E+05	-5.93E+05	2.47E+05
FD	-6.09E+05	2.18E+05	-6.01E+05	2.14E+05
L1	—	—	—	—
L3	-6.13E+05	2.25E+05	-6.09E+05	2.24E+05
L4	-6.13E+05	2.25E+05	-6.09E+05	2.24E+05
NF	—	—	—	—
NS	-6.00E+05	9.85E+04	-5.87E+05	9.51E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–447. Time history of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
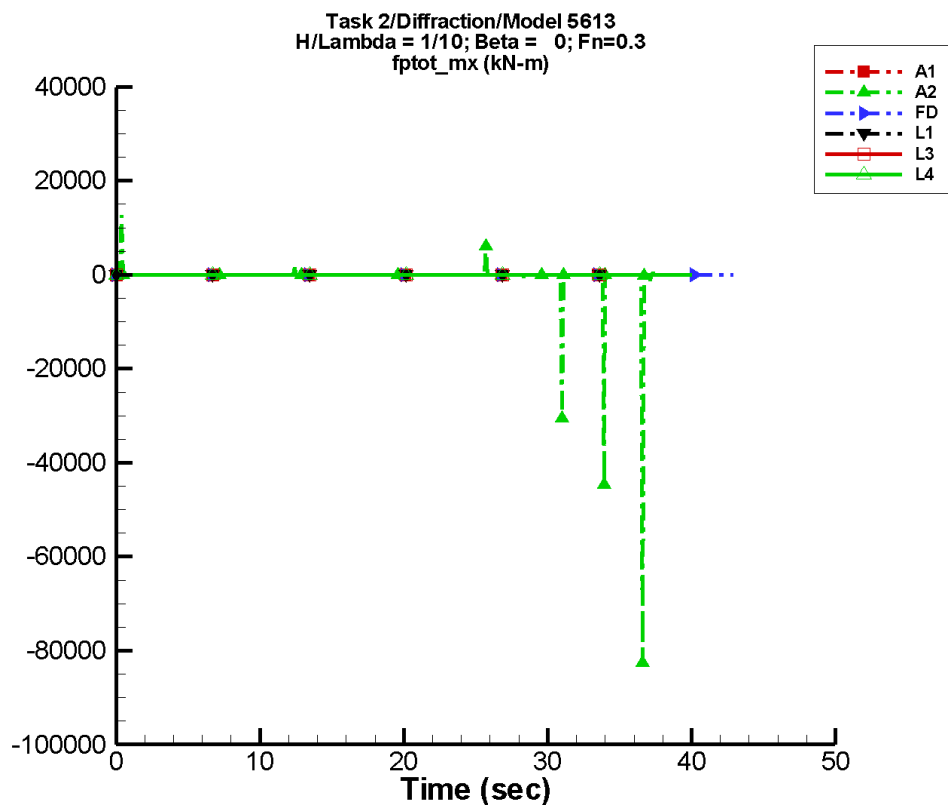
Table G–893. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-1.24E+05	6.79E+05	79	2.03E+05	178
FD	-1.37E+05	6.48E+05	81	2.19E+05	178
L1	—	—	—	—	—
L3	-1.46E+05	6.56E+05	83	2.20E+05	-179
L4	-1.46E+05	6.56E+05	83	2.20E+05	-179
NF	—	—	—	—	—
NS	-2.73E+05	4.77E+05	79	1.89E+05	-176

Table G–894. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-9.85E+05	5.94E+05	-9.69E+05	5.75E+05
FD	-9.81E+05	5.48E+05	-9.65E+05	5.39E+05
L1	—	—	—	—
L3	-9.90E+05	5.66E+05	-9.89E+05	5.61E+05
L4	-9.90E+05	5.66E+05	-9.89E+05	5.61E+05
NF	—	—	—	—
NS	-9.51E+05	2.42E+05	-9.47E+05	2.36E+05

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–448. Time history of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
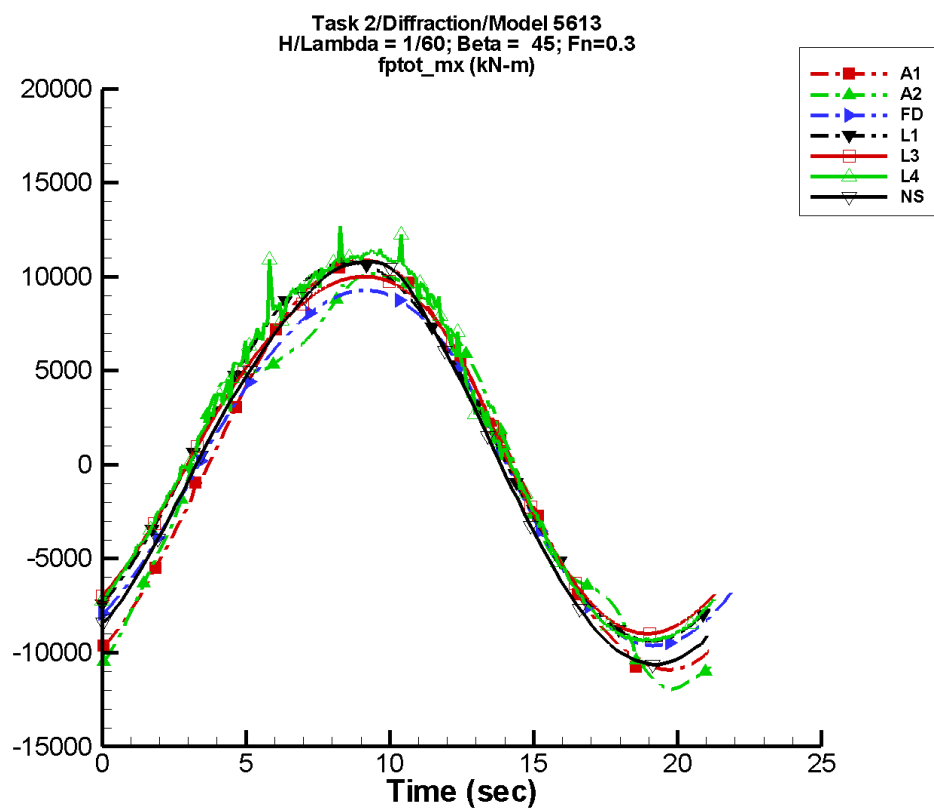
Table G–895. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	2.13E+05	1.69E+06	83	5.81E+05	120
FD	1.90E+05	1.64E+06	83	5.41E+05	120
L1	—	—	—	—	—
L3	1.79E+05	1.64E+06	87	5.44E+05	127
L4	1.79E+05	1.64E+06	87	5.44E+05	127
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–896. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

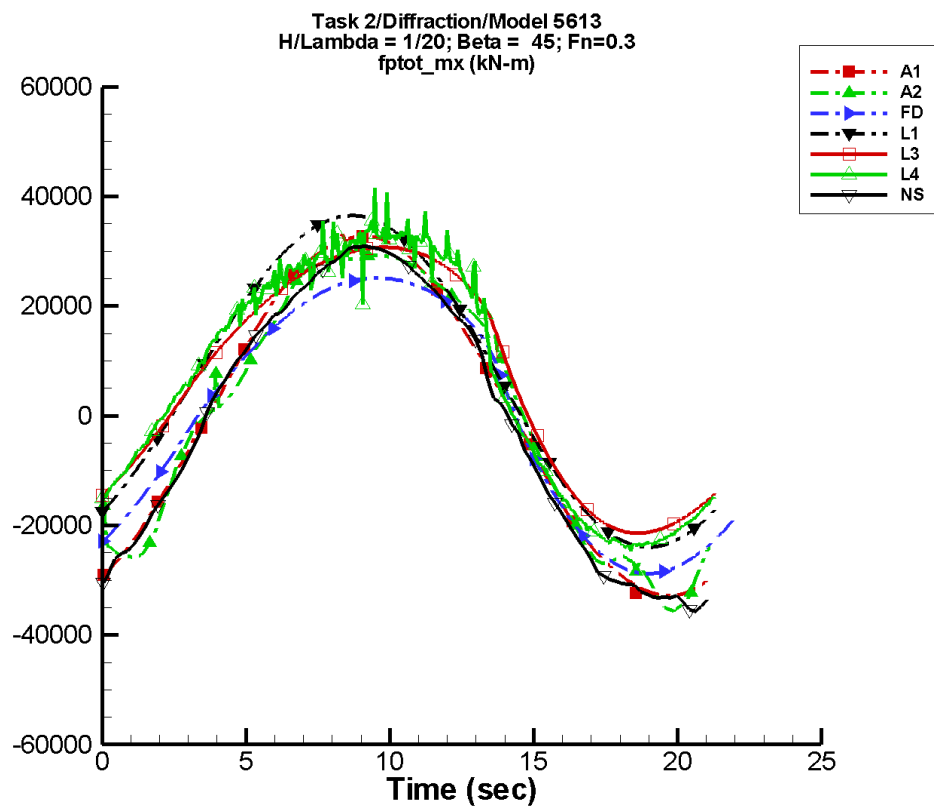| Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-1.37E+06	2.66E+06	-1.34E+06	2.56E+06
FD	-1.31E+06	2.60E+06	-1.30E+06	2.51E+06
L1	—	—	—	—
L3	-1.32E+06	2.61E+06	-1.31E+06	2.54E+06
L4	-1.32E+06	2.61E+06	-1.31E+06	2.54E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–449. Time history of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
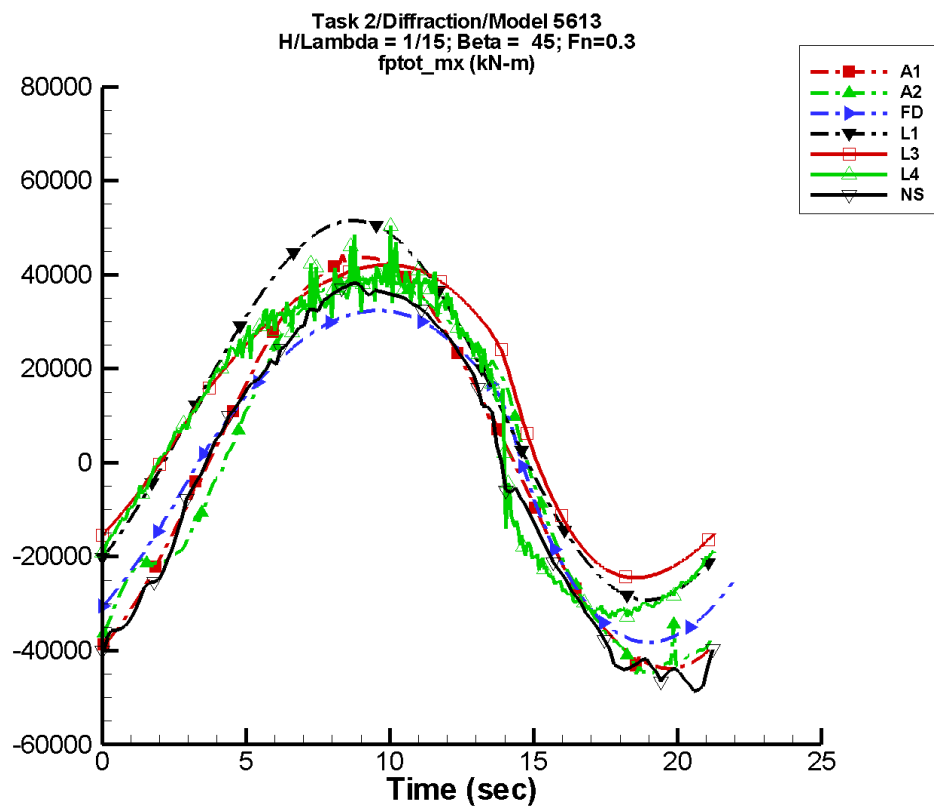
Table G–897. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-2.91E+03	2.30E+04	-8	8.42E+03	74
FD	-1.71E+04	3.50E+04	-9	1.82E+04	73
L1	—	—	—	—	—
L3	-2.19E+04	3.57E+04	-5	1.75E+04	84
L4	-2.19E+04	3.57E+04	-5	1.75E+04	84
NF	—	—	—	—	—
NS	-7.47E+04	931.	-3	1.65E+03	81

Table G–898. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-3.67E+04	1.79E+04	-3.57E+04	1.55E+04
FD	-7.33E+04	4.60E+03	-7.27E+04	4.55E+03
L1	—	—	—	—
L3	-7.86E+04	-99.4	-7.82E+04	-115.
L4	-7.86E+04	-99.4	-7.82E+04	-115.
NF	—	—	—	—
NS	-7.75E+04	-7.26E+04	-7.74E+04	-7.29E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–450. Time history of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
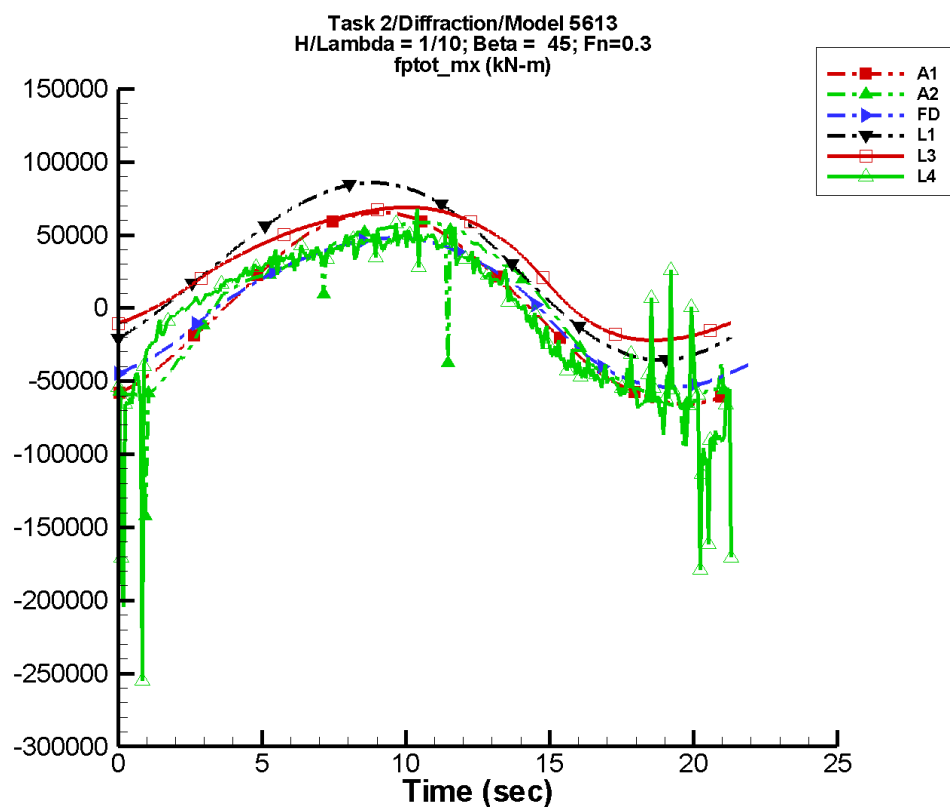
Table G–899. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-8.19E+04	2.02E+05	-9	7.70E+04	74
FD	-1.07E+05	1.80E+05	-8	8.44E+04	74
L1	—	—	—	—	—
L3	-1.08E+05	1.87E+05	-5	8.01E+04	83
L4	-1.08E+05	1.87E+05	-5	8.01E+04	83
NF	—	—	—	—	—
NS	-1.49E+05	1.08E+05	-7	7.32E+04	79

Table G–900. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-3.79E+05	6.40E+04	-3.72E+05	6.16E+04
FD	-3.71E+05	8.02E+03	-3.70E+05	7.30E+03
L1	—	—	—	—
L3	-3.77E+05	1.27E+04	-3.76E+05	1.26E+04
L4	-3.77E+05	1.27E+04	-3.76E+05	1.26E+04
NF	—	—	—	—
NS	-3.70E+05	-7.20E+04	-3.45E+05	-7.35E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–451. Time history of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
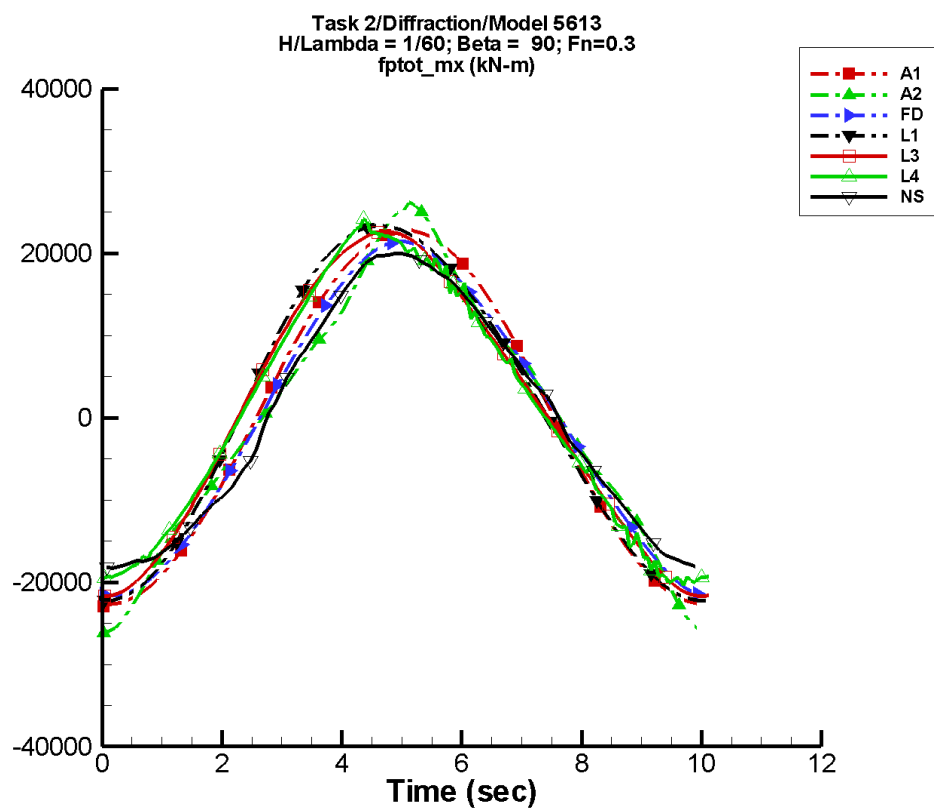
Table G–901. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-1.23E+05	2.66E+05	-8	9.90E+04	74
FD	-1.40E+05	2.30E+05	-7	9.47E+04	77
L1	—	—	—	—	—
L3	-1.42E+05	2.47E+05	-4	9.22E+04	83
L4	-1.42E+05	2.47E+05	-4	9.22E+04	83
NF	—	—	—	—	—
NS	-2.72E+05	8.74E+04	-9	8.25E+04	79

Table G–902. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

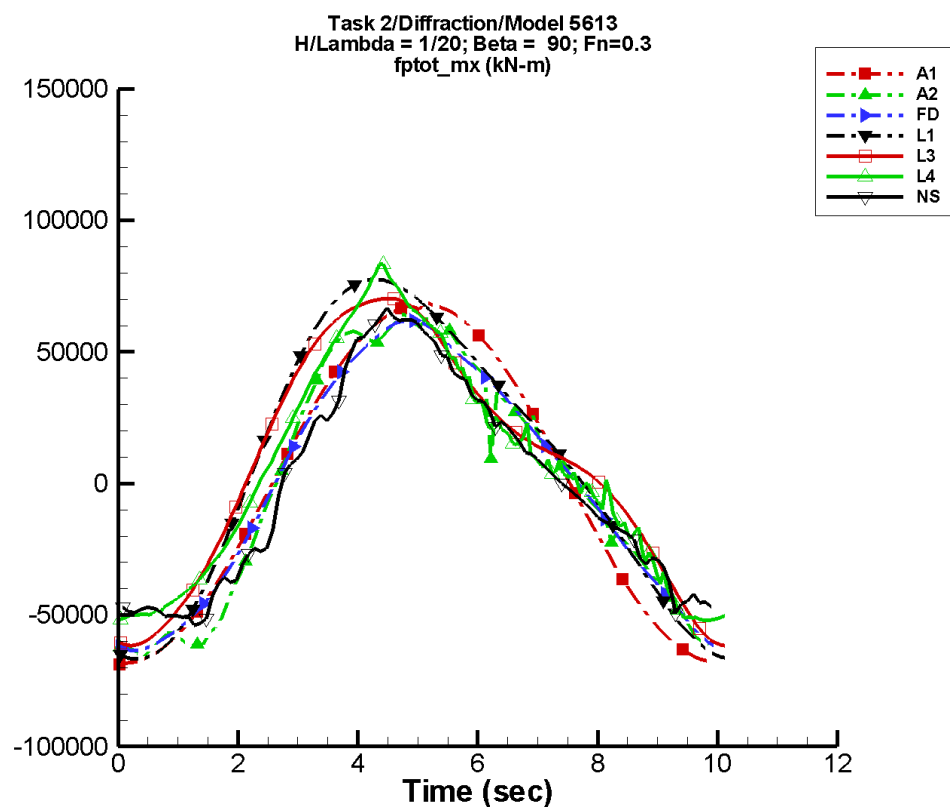| Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-5.86E+05	6.23E+04	-4.54E+05	5.88E+04
FD	-4.46E+05	1.08E+04	-4.30E+05	9.83E+03
L1	—	—	—	—
L3	-4.59E+05	2.61E+04	-4.52E+05	2.59E+04
L4	-4.59E+05	2.61E+04	-4.52E+05	2.59E+04
NF	—	—	—	—
NS	-4.70E+05	-1.93E+05	-4.54E+05	-1.93E+05

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–452. Time history of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–903. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
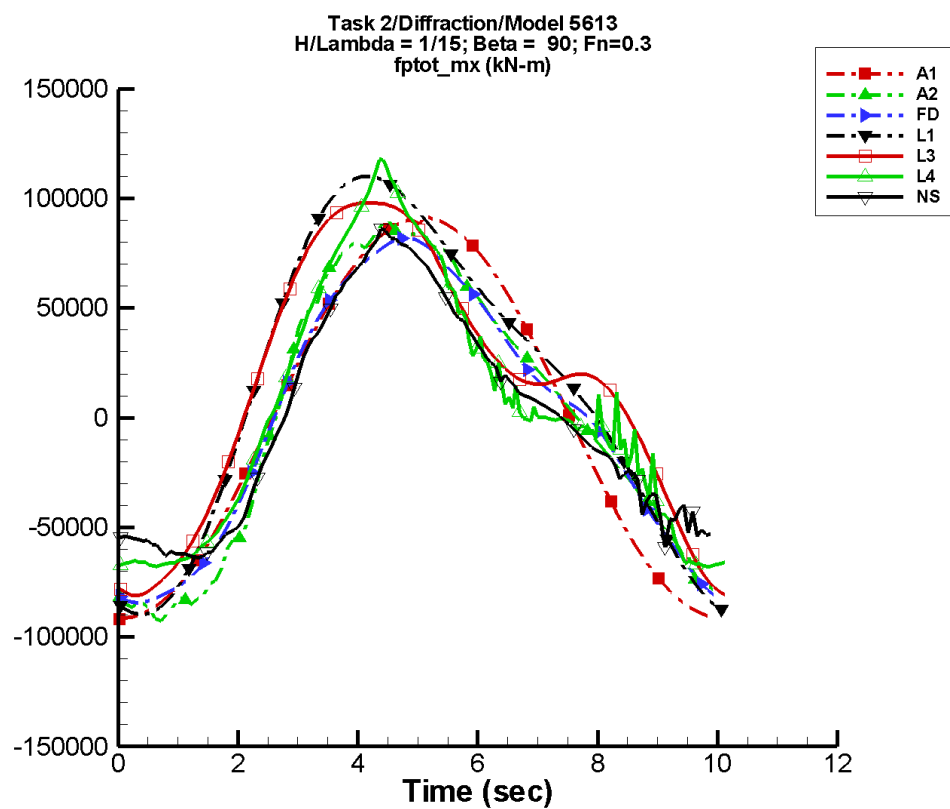
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	1.87E+05	5.86E+05	-10	4.52E+05	-112
FD	1.76E+05	5.86E+05	-9	4.92E+05	-105
L1	—	—	—	—	—
L3	1.91E+05	6.08E+05	-6	5.24E+05	-105
L4	1.91E+05	6.08E+05	-6	5.24E+05	-105
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–904. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-4.81E+05	1.95E+06	-3.23E+05	1.86E+06
FD	-3.71E+05	1.88E+06	-3.02E+05	1.80E+06
L1	—	—	—	—
L3	-3.82E+05	1.82E+06	-3.44E+05	1.86E+06
L4	-3.82E+05	1.82E+06	-3.44E+05	1.86E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–453. Time history of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
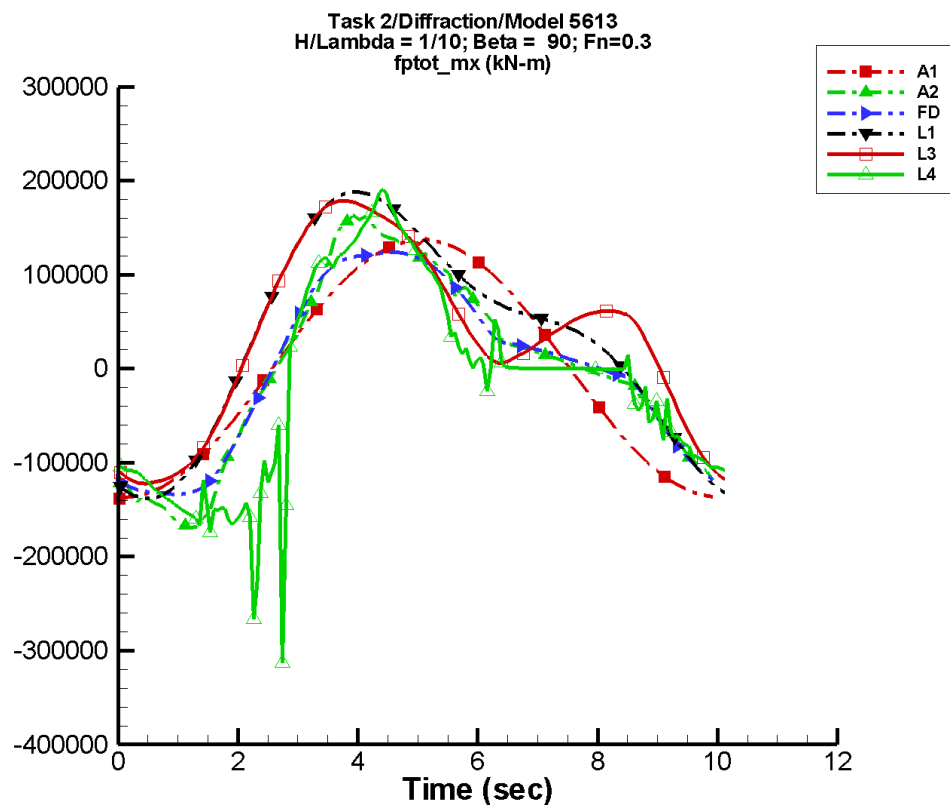
Table G–905. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-2.91E+03	7.40E+04	-106	1.64E+04	-116
FD	-1.73E+04	5.17E+04	-111	1.71E+04	-138
L1	—	—	—	—	—
L3	-2.17E+04	5.18E+04	-109	1.76E+04	-134
L4	-2.17E+04	5.18E+04	-109	1.76E+04	-134
NF	—	—	—	—	—
NS	-7.51E+04	1.57E+04	-93	2.80E+03	-84

Table G–906. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.09E+05	7.14E+04	-1.08E+05	7.00E+04
FD	-9.15E+04	2.26E+04	-9.09E+04	2.24E+04
L1	—	—	—	—
L3	-9.70E+04	1.86E+04	-9.64E+04	1.85E+04
L4	-9.70E+04	1.86E+04	-9.64E+04	1.85E+04
NF	—	—	—	—
NS	-9.55E+04	-6.00E+04	-9.55E+04	-6.02E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–454. Time history of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
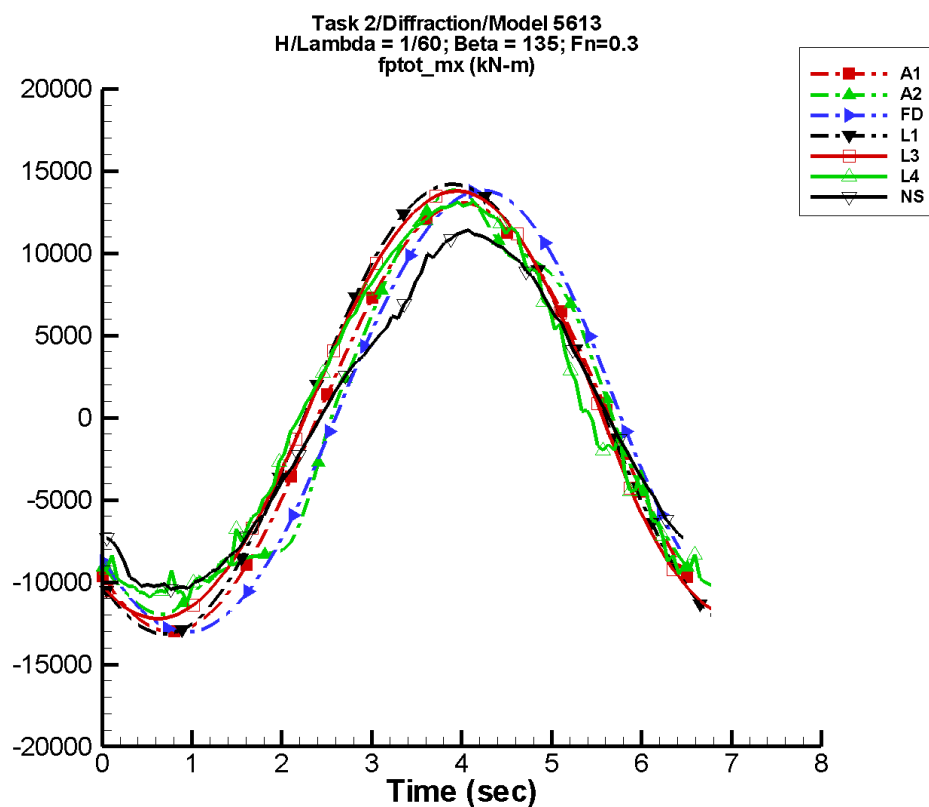
Table G–907. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-8.11E+04	3.80E+05	-96	8.71E+04	-69
FD	-1.05E+05	3.62E+05	-98	8.50E+04	-72
L1	—	—	—	—	—
L3	-1.08E+05	3.71E+05	-95	9.14E+04	-66
L4	-1.08E+05	3.71E+05	-95	9.14E+04	-66
NF	—	—	—	—	—
NS	-1.51E+05	2.88E+05	-90	8.80E+04	-68

Table G–908. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
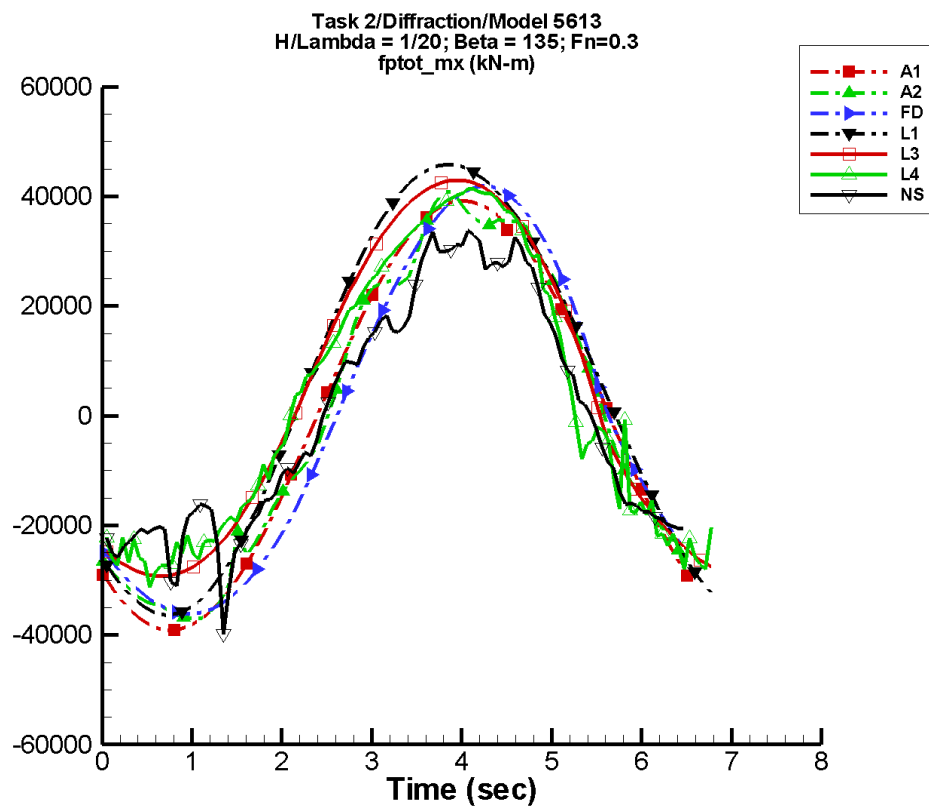
Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-6.04E+05	3.14E+05	-5.91E+05	2.55E+05
FD	-6.08E+05	2.18E+05	-6.02E+05	2.14E+05
L1	—	—	—	—
L3	-6.13E+05	2.25E+05	-6.09E+05	2.24E+05
L4	-6.13E+05	2.25E+05	-6.09E+05	2.24E+05
NF	—	—	—	—
NS	-6.00E+05	9.84E+04	-5.86E+05	9.50E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.0
fhst_my (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–455. Time history of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
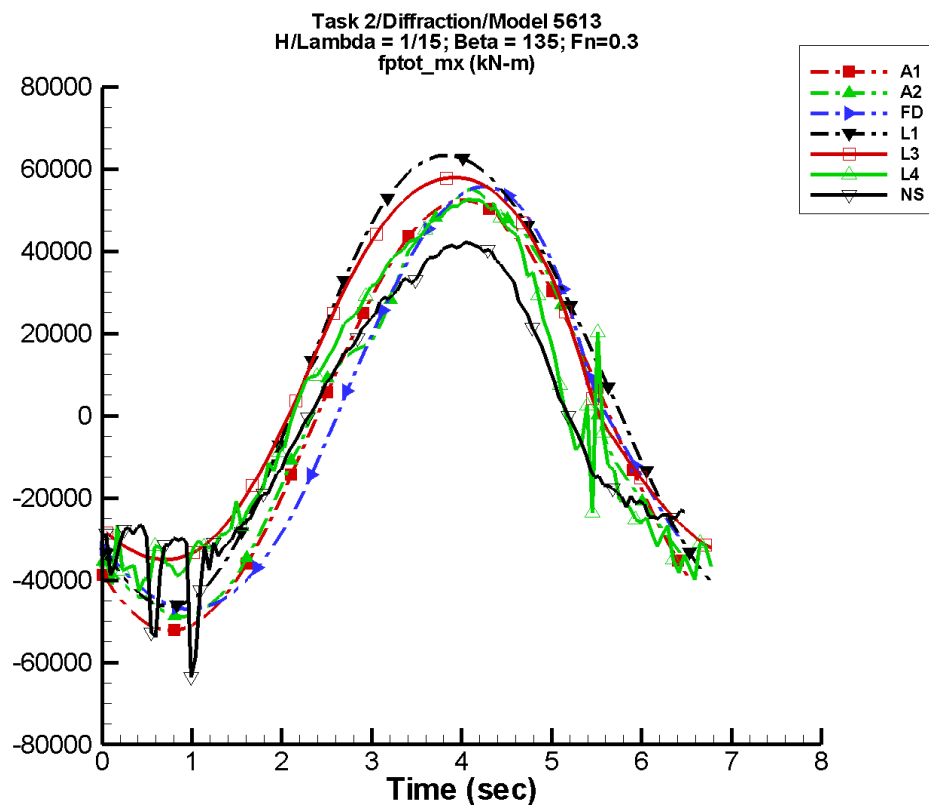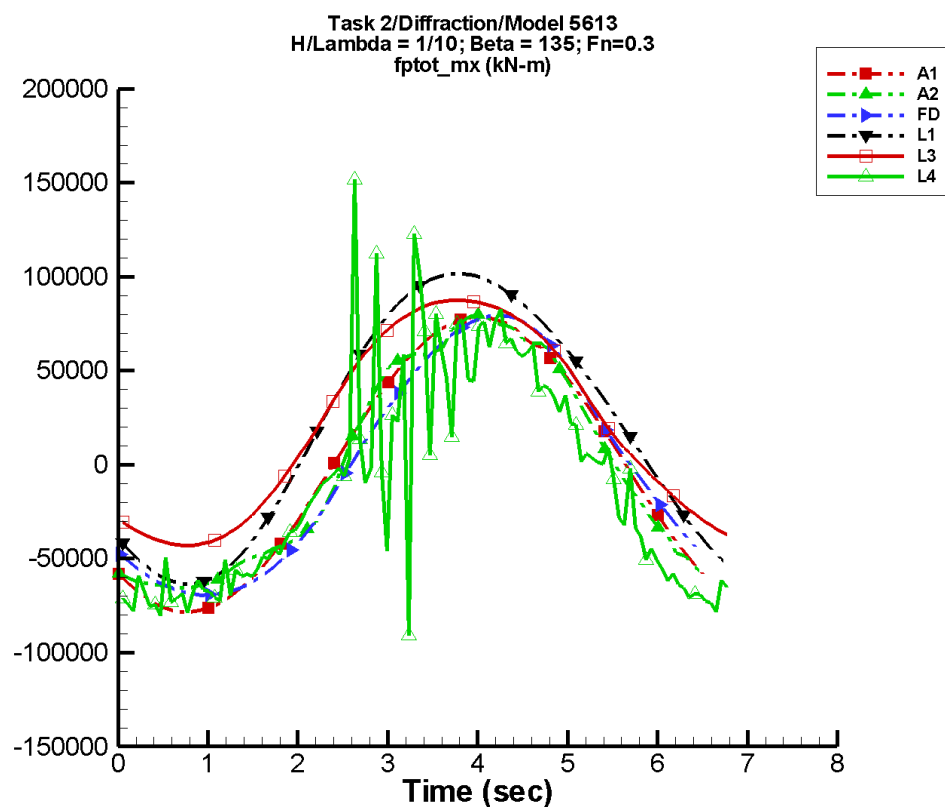
Table G–909. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-1.23E+05	6.69E+05	-95	1.99E+05	-26
FD	-1.37E+05	6.36E+05	-96	2.00E+05	-30
L1	—	—	—	—	—
L3	-1.43E+05	6.53E+05	-92	2.15E+05	-22
L4	-1.43E+05	6.53E+05	-92	2.15E+05	-22
NF	—	—	—	—	—
NS	-2.72E+05	4.72E+05	-86	1.82E+05	-20

Table G–910. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-9.89E+05	5.96E+05	-9.69E+05	5.71E+05
FD	-9.81E+05	5.49E+05	-9.65E+05	5.39E+05
L1	—	—	—	—
L3	-9.90E+05	5.66E+05	-9.88E+05	5.61E+05
L4	-9.90E+05	5.66E+05	-9.88E+05	5.61E+05
NF	—	—	—	—
NS	-9.54E+05	2.41E+05	-9.42E+05	2.35E+05

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–456. Time history of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
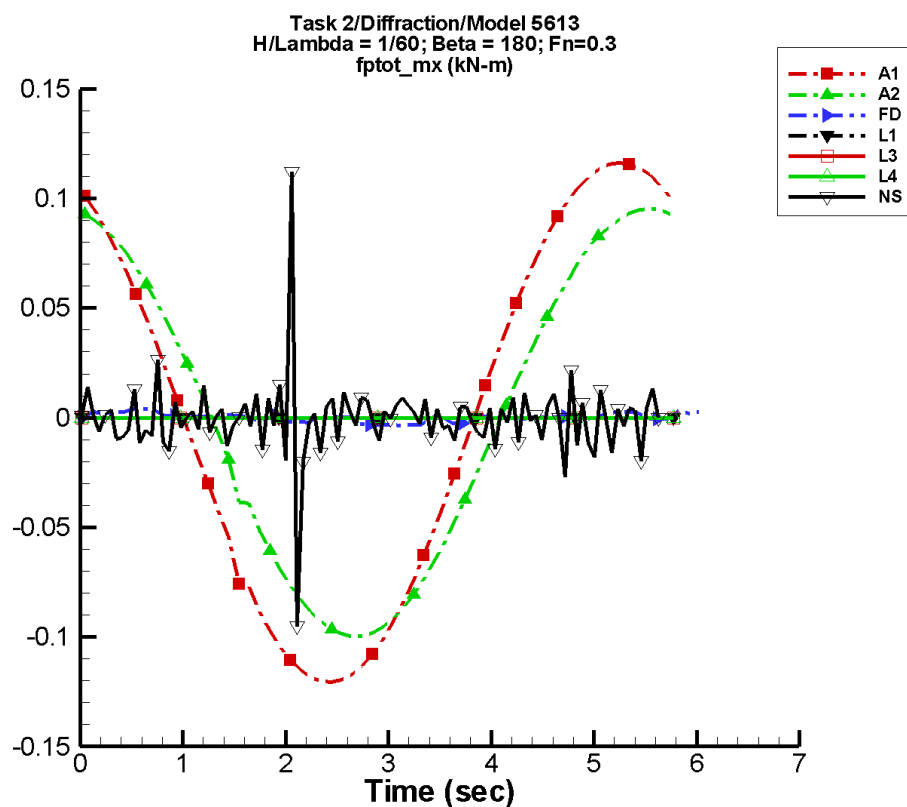
Table G–911. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	2.22E+05	1.72E+06	-99	5.43E+05	25
FD	1.79E+05	1.64E+06	-98	5.56E+05	32
L1	—	—	—	—	—
L3	1.79E+05	1.63E+06	-95	5.42E+05	39
L4	1.79E+05	1.63E+06	-95	5.42E+05	39
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–912. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.37E+06	2.68E+06	-1.35E+06	2.57E+06
FD	-1.31E+06	2.62E+06	-1.30E+06	2.52E+06
L1	—	—	—	—
L3	-1.32E+06	2.61E+06	-1.31E+06	2.55E+06
L4	-1.32E+06	2.61E+06	-1.31E+06	2.55E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–457. Time history of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–913. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-2.65E+03	5.13E+04	-129	2.55E+04	115
FD	-1.66E+04	4.31E+04	-148	1.94E+04	131
L1	—	—	—	—	—
L3	-2.19E+04	4.38E+04	-144	1.91E+04	136
L4	-2.19E+04	4.38E+04	-144	1.91E+04	136
NF	—	—	—	—	—
NS	-7.53E+04	1.50E+04	-101	4.09E+03	174

Table G–914. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
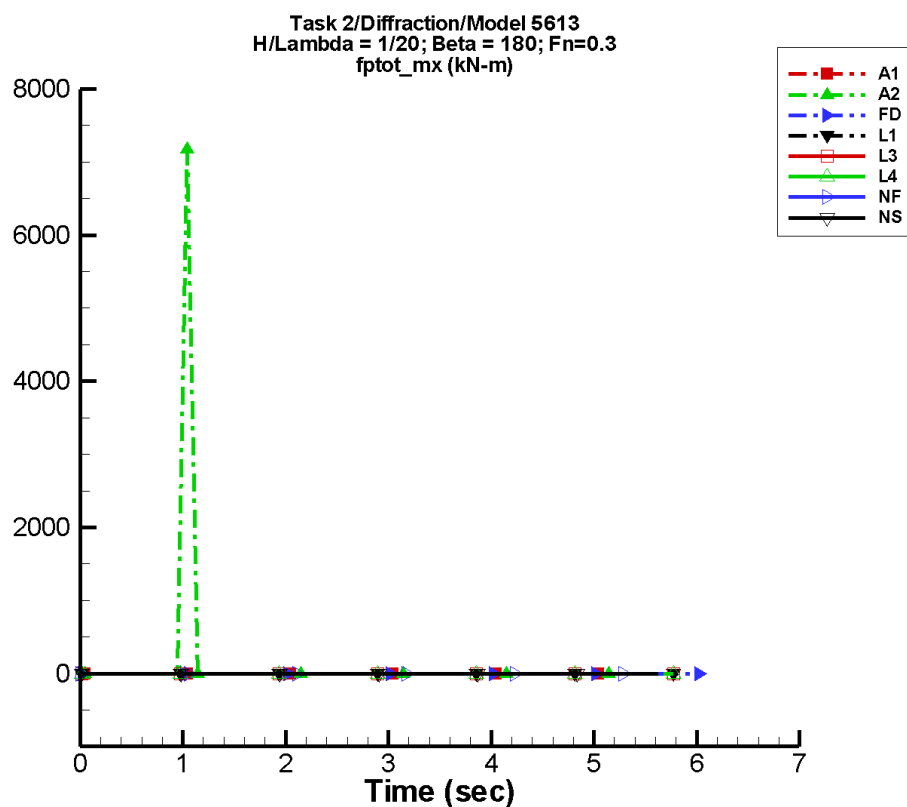
Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-7.90E+04	6.42E+04	-7.66E+04	6.09E+04
FD	-8.40E+04	1.73E+04	-8.26E+04	1.72E+04
L1	—	—	—	—
L3	-8.96E+04	1.26E+04	-8.91E+04	1.25E+04
L4	-8.96E+04	1.26E+04	-8.91E+04	1.25E+04
NF	—	—	—	—
NS	-9.43E+04	-6.11E+04	-9.37E+04	-6.14E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–458. Time history of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
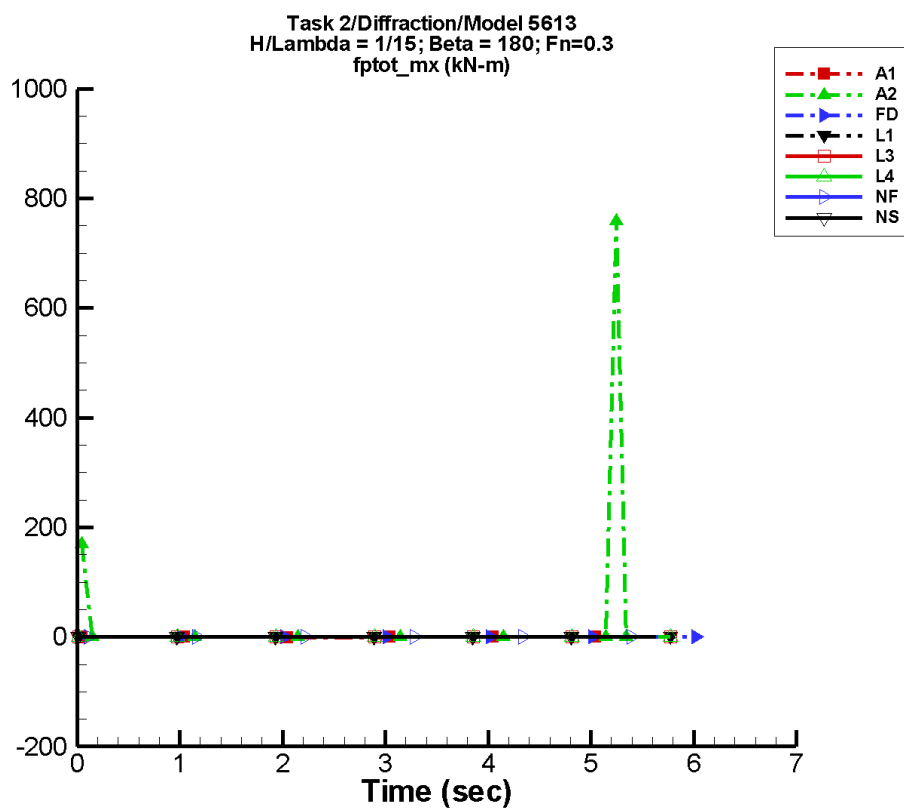
Table G–915. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-8.54E+04	3.28E+05	-116	9.62E+04	-163
FD	-1.11E+05	3.19E+05	-116	8.03E+04	-159
L1	—	—	—	—	—
L3	-1.12E+05	3.23E+05	-113	7.85E+04	-151
L4	-1.12E+05	3.23E+05	-113	7.85E+04	-151
NF	—	—	—	—	—
NS	-1.60E+05	2.87E+05	-104	9.17E+04	-146

Table G–916. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-5.84E+05	2.05E+05	-5.77E+05	1.98E+05
FD	-5.85E+05	1.62E+05	-5.82E+05	1.58E+05
L1	—	—	—	—
L3	-5.92E+05	1.61E+05	-5.90E+05	1.60E+05
L4	-5.92E+05	1.61E+05	-5.90E+05	1.60E+05
NF	—	—	—	—
NS	-5.98E+05	8.19E+04	-5.95E+05	8.05E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–459. Time history of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
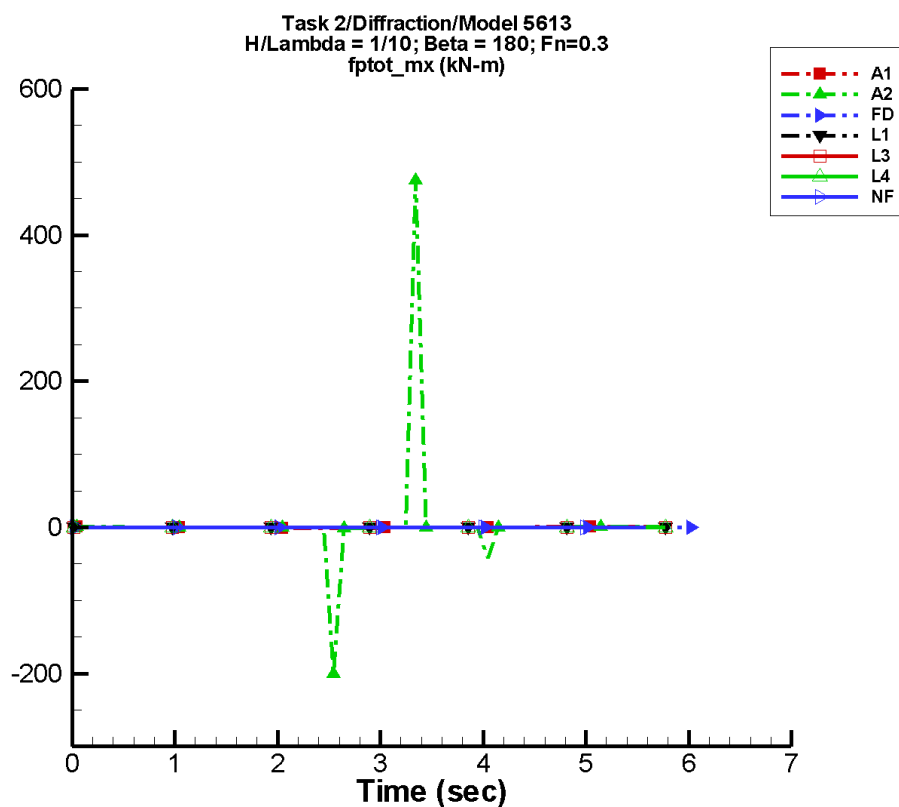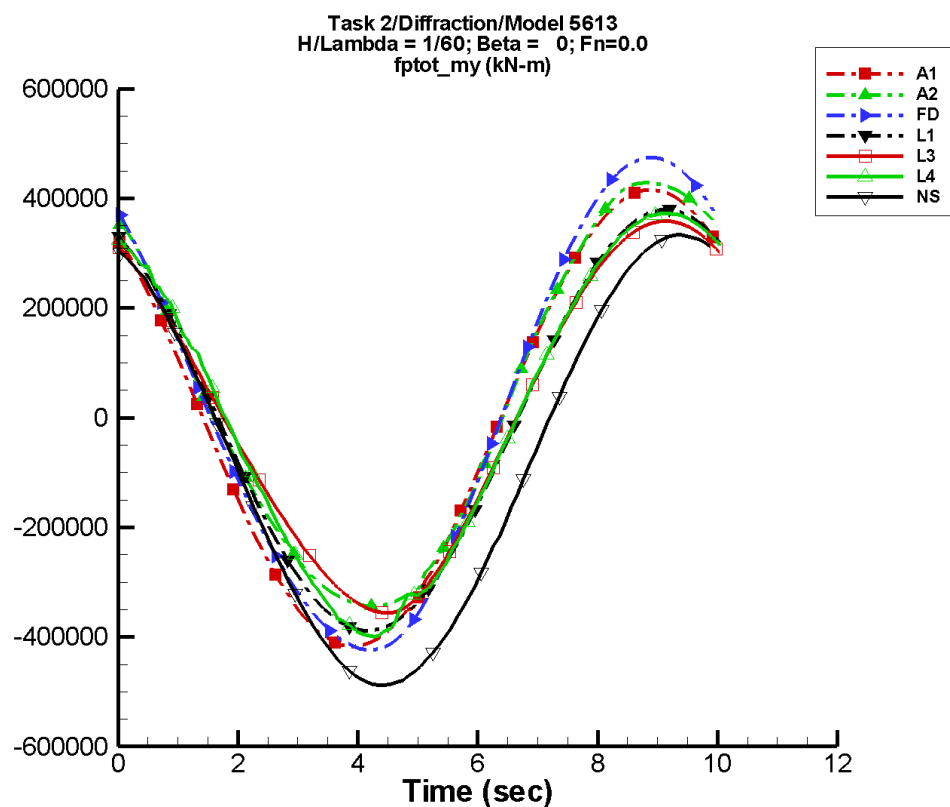
Table G–917. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-1.22E+05	6.22E+05	-106	6.70E+04	-120
FD	-1.40E+05	5.92E+05	-106	4.66E+04	-120
L1	—	—	—	—	—
L3	-1.39E+05	6.00E+05	-104	4.53E+04	-110
L4	-1.39E+05	6.00E+05	-104	4.53E+04	-110
NF	—	—	—	—	—
NS	-2.71E+05	5.15E+05	-89	5.75E+04	-85

Table G–918. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-8.88E+05	4.56E+05	-8.70E+05	4.48E+05
FD	-8.86E+05	4.14E+05	-8.65E+05	4.09E+05
L1	—	—	—	—
L3	-8.94E+05	4.20E+05	-8.85E+05	4.19E+05
L4	-8.94E+05	4.20E+05	-8.85E+05	4.19E+05
NF	—	—	—	—
NS	-9.91E+05	2.14E+05	-9.58E+05	2.11E+05

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–460. Time history of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
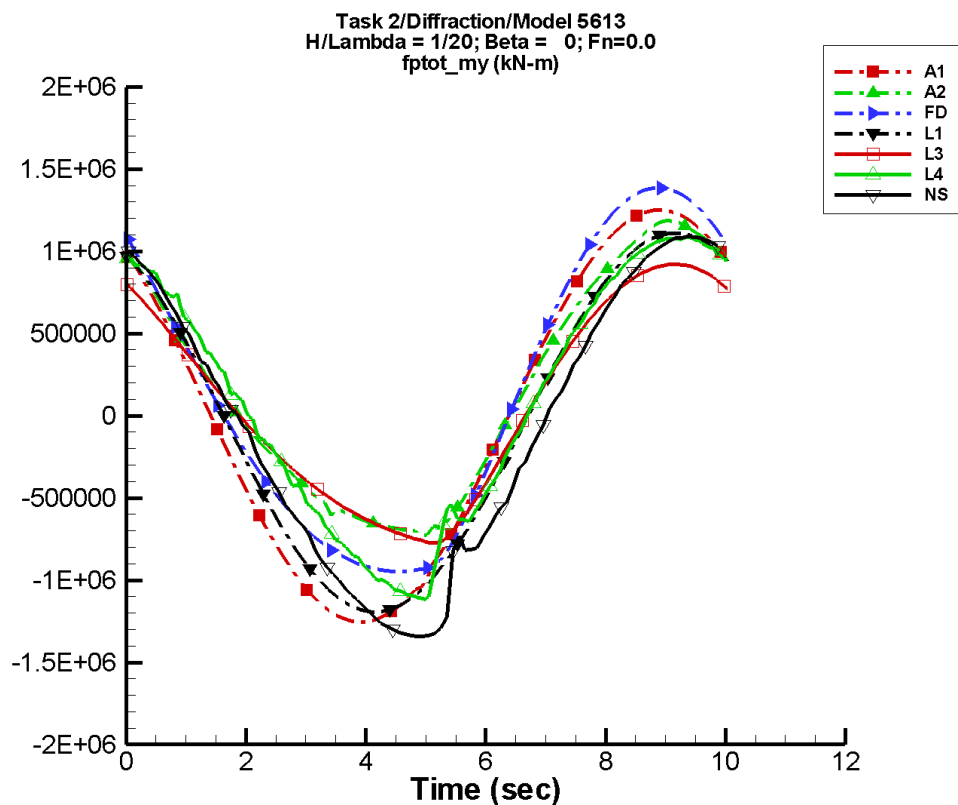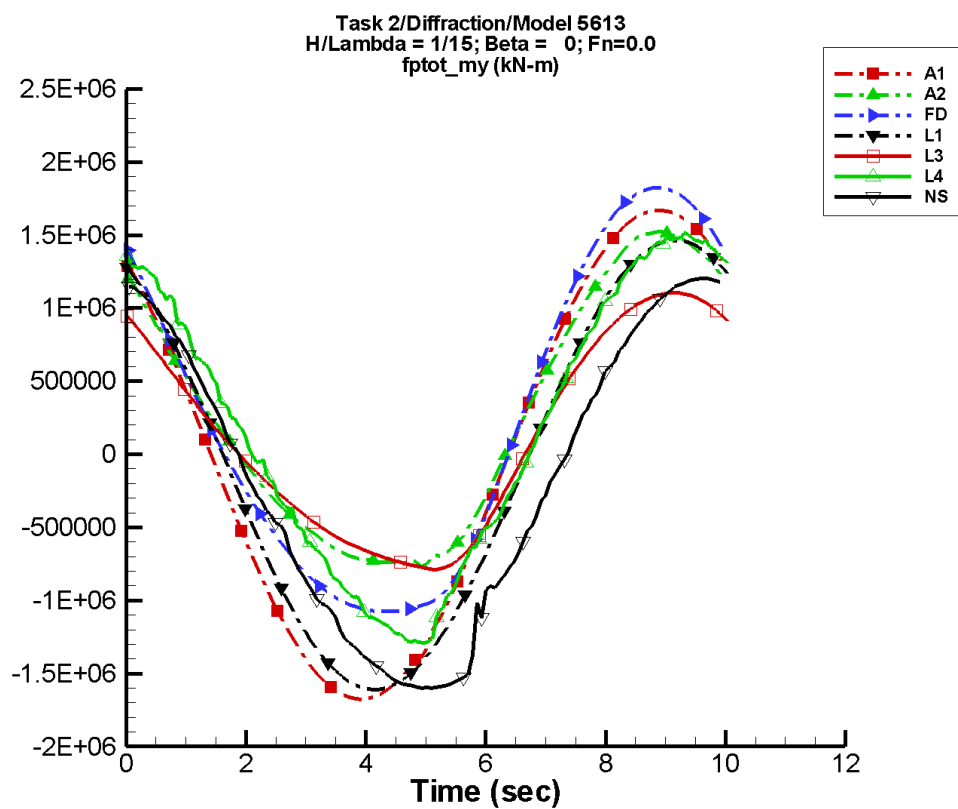
Table G–919. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	2.97E+05	1.66E+06	-117	5.34E+05	-25
FD	1.83E+05	1.49E+06	-111	4.09E+05	-19
L1	—	—	—	—	—
L3	1.70E+05	1.48E+06	-107	4.07E+05	-13
L4	1.70E+05	1.48E+06	-107	4.07E+05	-13
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–920. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-1.29E+06	2.42E+06	-1.27E+06	2.37E+06
FD	-1.24E+06	2.10E+06	-1.22E+06	2.02E+06
L1	—	—	—	—
L3	-1.25E+06	2.14E+06	-1.24E+06	2.00E+06
L4	-1.25E+06	2.14E+06	-1.24E+06	2.00E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–461. Time history of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–921. Coefficients of the Fourier fit $a_0+a_1\sin\left(\omega t+\Phi_1\right)+a_2\sin\left(2\omega t+\Phi_2\right)+$ $\cdots$ of M_y^{hst} for one period for $H/\lambda=1/60$, $\lambda/L=1$, $\beta=0°$, $F_n=0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-2.61E+03	5.22E+04	118	2.43E+04	45
FD	-1.70E+04	4.27E+04	138	2.00E+04	30
L1	—	—	—	—	—
L3	-2.23E+04	4.27E+04	139	1.99E+04	38
L4	-2.23E+04	4.27E+04	139	1.99E+04	38
NF	—	—	—	—	—
NS	-7.53E+04	1.47E+04	92	3.79E+03	-17

Table G–922. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda=1/60$, $\lambda/L=1$, $\beta=0°$, $F_n=0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-7.90E+04	6.42E+04	-7.89E+04	6.39E+04
FD	-8.40E+04	1.73E+04	-8.40E+04	1.73E+04
L1	—	—	—	—
L3	-8.96E+04	1.26E+04	-8.96E+04	1.26E+04
L4	-8.96E+04	1.26E+04	-8.96E+04	1.26E+04
NF	—	—	—	—
NS	-9.43E+04	-6.11E+04	-9.37E+04	-6.13E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–462. Time history of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
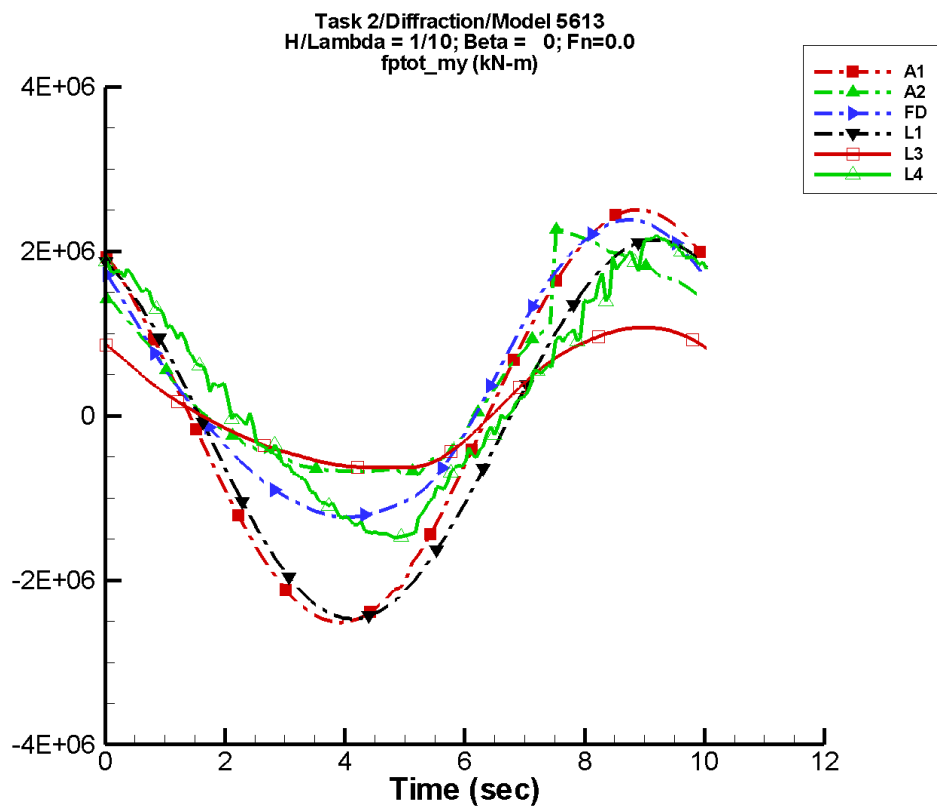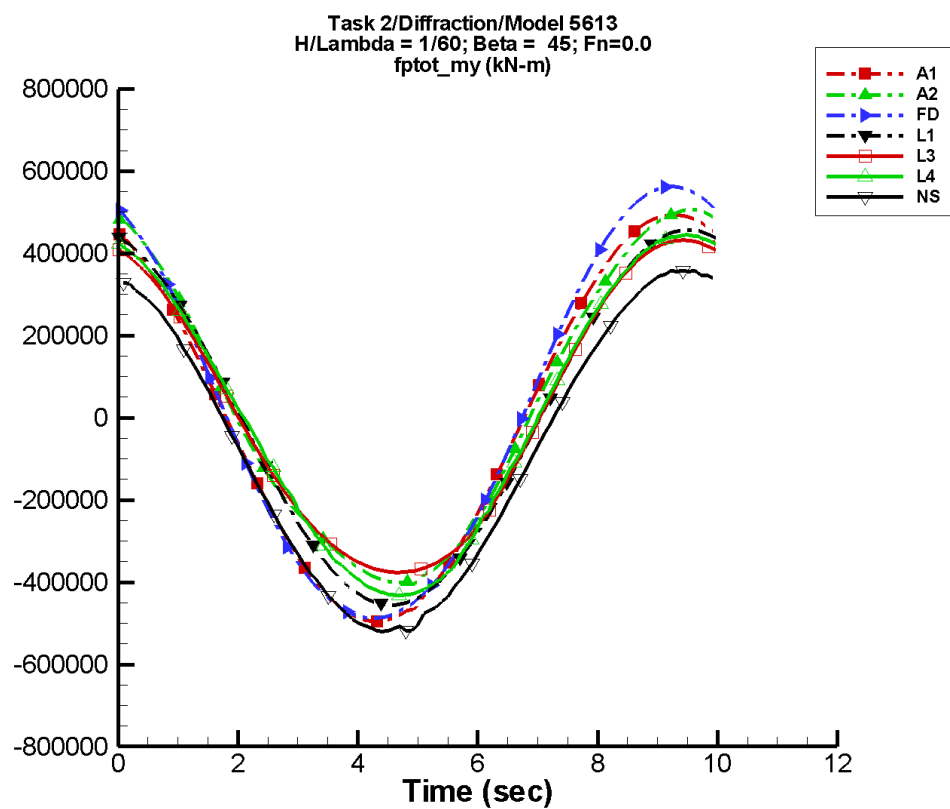
Table G–923. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-8.68E+04	3.25E+05	108	8.82E+04	-29
FD	-1.08E+05	3.17E+05	108	8.36E+04	-42
L1	—	—	—	—	—
L3	-1.09E+05	3.18E+05	110	8.85E+04	-36
L4	-1.09E+05	3.18E+05	110	8.85E+04	-36
NF	—	—	—	—	—
NS	-1.60E+05	2.82E+05	97	8.67E+04	-44

Table G–924. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-5.84E+05	2.05E+05	-5.76E+05	2.05E+05
FD	-5.85E+05	1.62E+05	-5.84E+05	1.62E+05
L1	—	—	—	—
L3	-5.92E+05	1.61E+05	-5.91E+05	1.61E+05
L4	-5.92E+05	1.61E+05	-5.91E+05	1.61E+05
NF	—	—	—	—
NS	-5.98E+05	8.18E+04	-5.88E+05	8.06E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–463. Time history of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

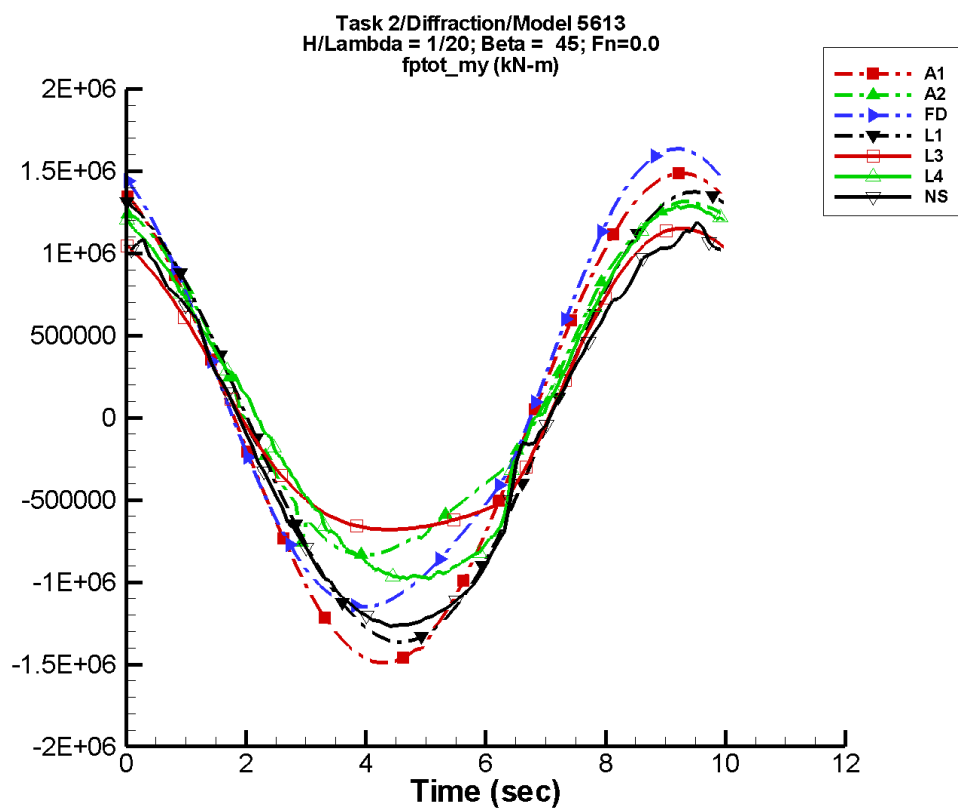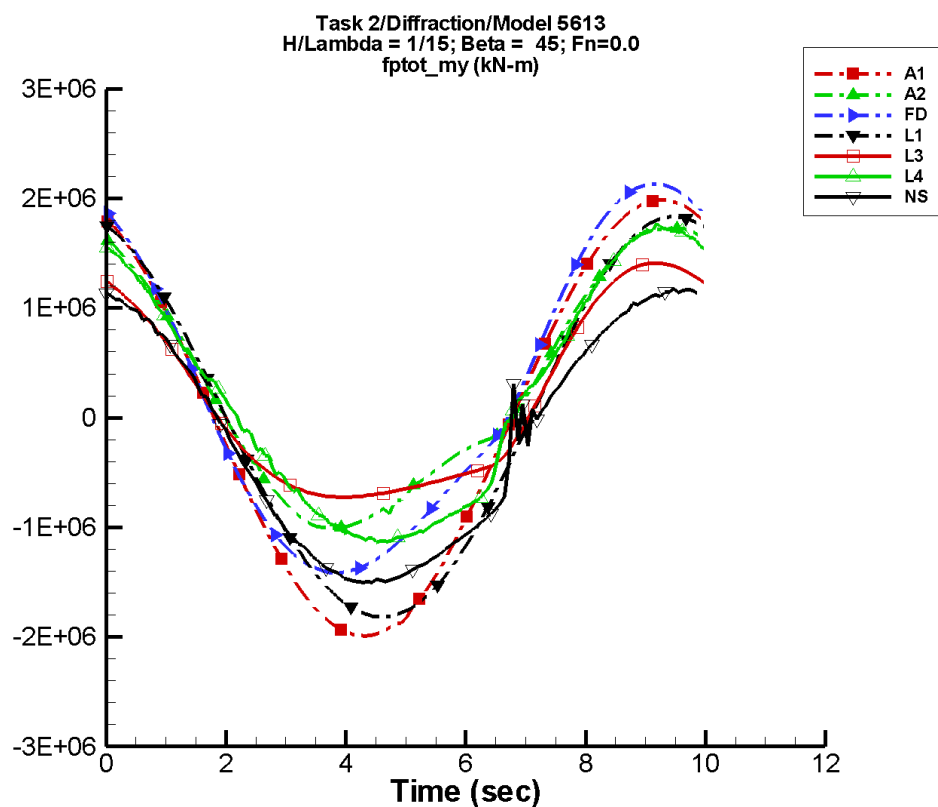Table G–925. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-1.25E+05	6.33E+05	98	5.97E+04	-65
FD	-1.37E+05	5.97E+05	97	4.32E+04	-86
L1	—	—	—	—	—
L3	-1.38E+05	6.15E+05	100	5.82E+04	-89
L4	-1.38E+05	6.15E+05	100	5.82E+04	-89
NF	—	—	—	—	—
NS	-2.75E+05	5.25E+05	84	5.35E+04	-99

Table G–926. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-8.89E+05	4.96E+05	-8.78E+05	4.56E+05
FD	-8.87E+05	4.14E+05	-8.85E+05	4.15E+05
L1	—	—	—	—
L3	-8.95E+05	4.20E+05	-8.94E+05	4.20E+05
L4	-8.95E+05	4.20E+05	-8.94E+05	4.20E+05
NF	—	—	—	—
NS	-9.91E+05	2.14E+05	-9.58E+05	2.11E+05

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–464. Time history of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
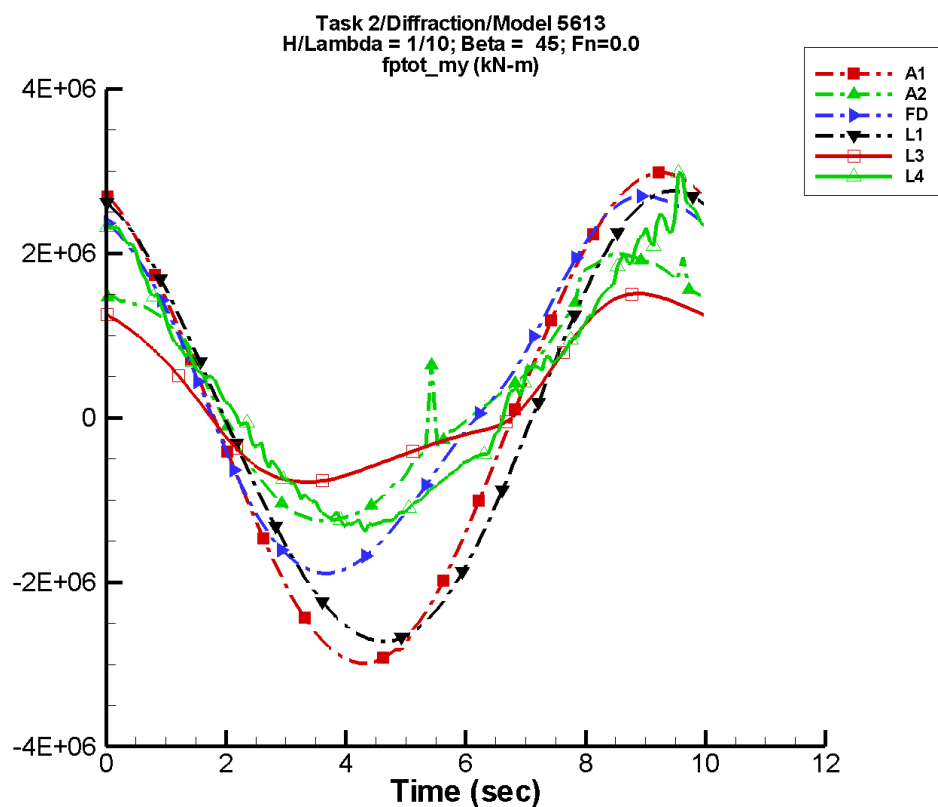
Table G–927. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	3.04E+05	1.64E+06	106	5.70E+05	-168
FD	1.76E+05	1.47E+06	101	3.88E+05	-178
L1	—	—	—	—	—
L3	1.64E+05	1.45E+06	102	3.78E+05	-178
L4	1.64E+05	1.45E+06	102	3.78E+05	-178
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–928. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-1.30E+06	2.42E+06	-1.29E+06	2.43E+06
FD	-1.24E+06	2.10E+06	-1.24E+06	2.06E+06
L1	—	—	—	—
L3	-1.25E+06	2.14E+06	-1.24E+06	2.06E+06
L4	-1.25E+06	2.14E+06	-1.24E+06	2.06E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–465. Time history of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

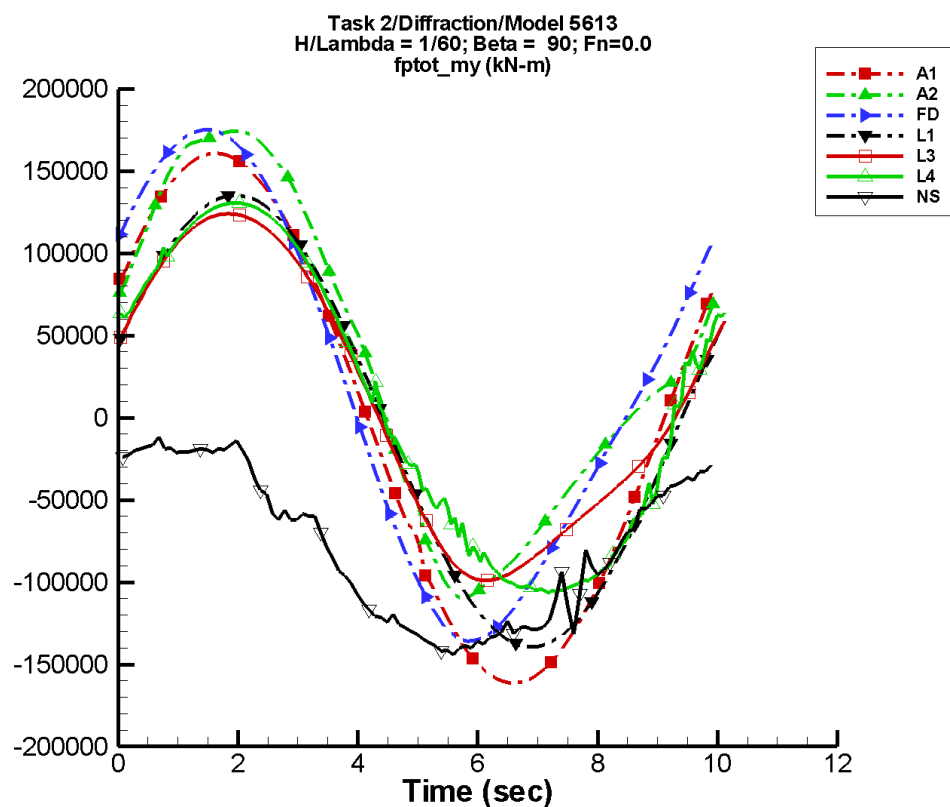Table G–929. Coefficients of the Fourier fit $a_0+a_1 \sin{(\omega t + \Phi_1)}+a_2 \sin{(2\omega t + \Phi_2)}+$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-3.32E+03	7.43E+04	101	1.11E+04	-67
FD	-1.68E+04	5.10E+04	110	1.78E+04	-48
L1	—	—	—	—	—
L3	-2.20E+04	5.20E+04	106	1.75E+04	-53
L4	-2.20E+04	5.20E+04	106	1.75E+04	-53
NF	—	—	—	—	—
NS	-1.35E+04	1.47E+04	99	5.77E+03	-62

Table G–930. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.09E+05	7.14E+04	-1.08E+05	7.15E+04
FD	-9.15E+04	2.27E+04	-9.12E+04	2.26E+04
L1	—	—	—	—
L3	-9.70E+04	1.86E+04	-9.69E+04	1.86E+04
L4	-9.70E+04	1.86E+04	-9.69E+04	1.86E+04
NF	—	—	—	—
NS	-4.09E+04	-1.70E+03	-3.96E+04	-1.68E+03

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–466. Time history of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

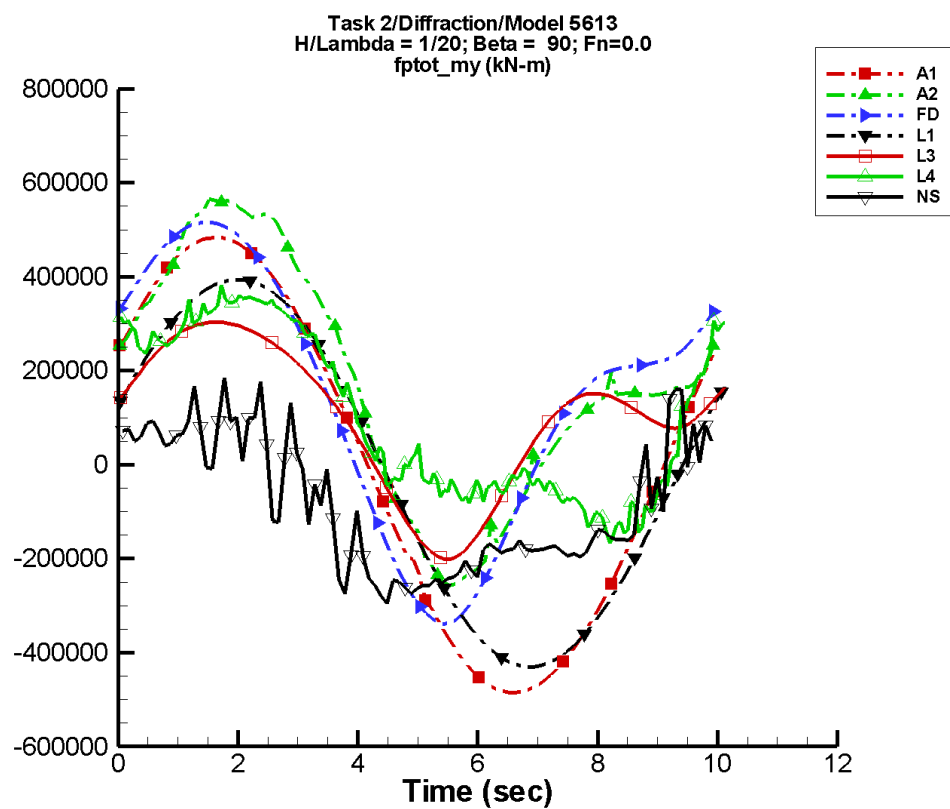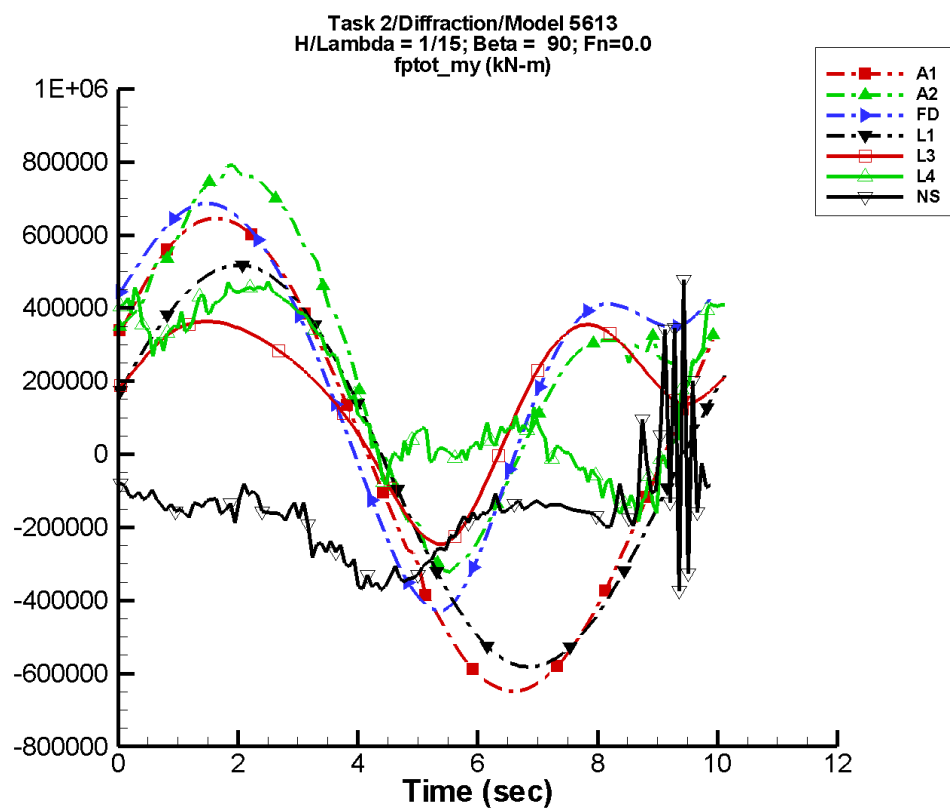Table G–931. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-8.31E+04	3.87E+05	88	8.58E+04	-125
FD	-1.06E+05	3.70E+05	96	8.92E+04	-113
L1	—	—	—	—	—
L3	-1.08E+05	3.75E+05	93	8.70E+04	-121
L4	-1.08E+05	3.75E+05	93	8.70E+04	-121
NF	—	—	—	—	—
NS	-1.12E+05	1.36E+05	87	4.11E+04	-107

Table G–932. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-6.05E+05	3.14E+05	-5.97E+05	2.85E+05
FD	-6.09E+05	2.18E+05	-6.06E+05	2.17E+05
L1	—	—	—	—
L3	-6.13E+05	2.25E+05	-6.12E+05	2.25E+05
L4	-6.13E+05	2.25E+05	-6.12E+05	2.25E+05
NF	—	—	—	—
NS	-3.44E+05	-886.	-3.23E+05	-793.

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–467. Time history of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
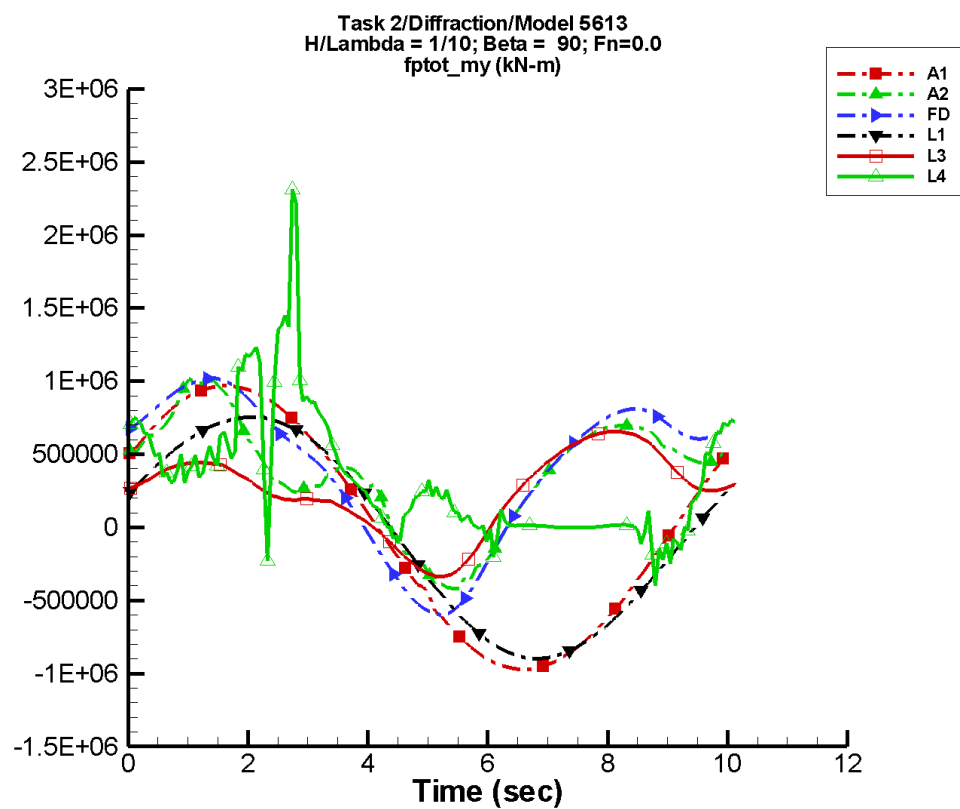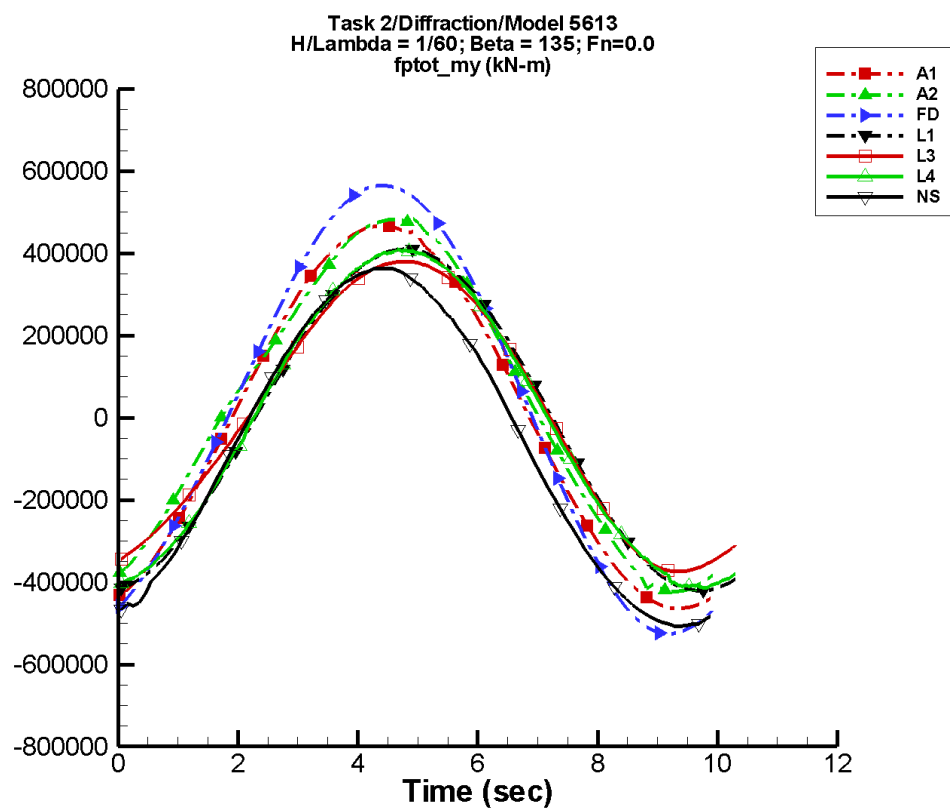
Table G–933. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-1.21E+05	6.75E+05	87	2.05E+05	-168
FD	-1.42E+05	6.46E+05	93	2.07E+05	-156
L1	—	—	—	—	—
L3	-1.41E+05	6.52E+05	90	2.14E+05	-164
L4	-1.41E+05	6.52E+05	90	2.14E+05	-164
NF	—	—	—	—	—
NS	-1.50E+05	2.74E+05	84	7.99E+04	-128

Table G–934. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-9.85E+05	6.25E+05	-9.84E+05	5.89E+05
FD	-9.81E+05	5.49E+05	-9.81E+05	5.46E+05
L1	—	—	—	—
L3	-9.90E+05	5.66E+05	-9.88E+05	5.65E+05
L4	-9.90E+05	5.66E+05	-9.88E+05	5.65E+05
NF	—	—	—	—
NS	-5.85E+05	8.44E+04	-5.80E+05	8.39E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 45; Fn=0.3
fhst_my (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–468. Time history of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–935. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	2.16E+05	1.70E+06	91	5.83E+05	137
FD	1.90E+05	1.63E+06	95	5.73E+05	145
L1	—	—	—	—	—
L3	1.73E+05	1.63E+06	92	5.66E+05	137
L4	1.73E+05	1.63E+06	92	5.66E+05	137
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–936. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
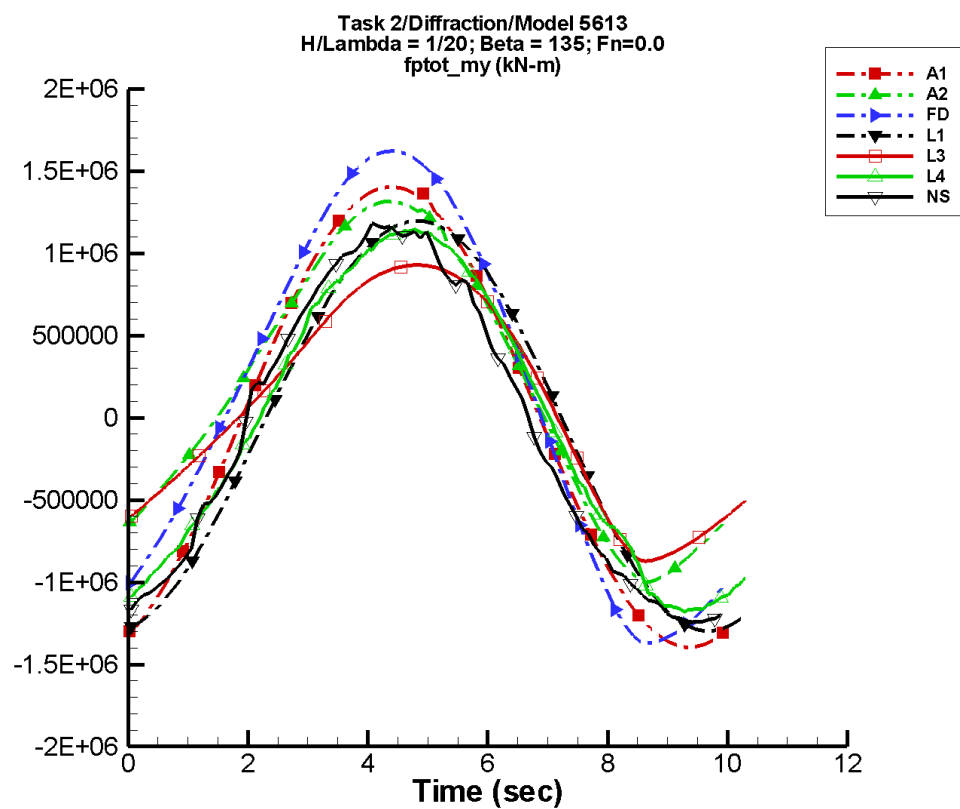
Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-1.37E+06	2.66E+06	-1.36E+06	2.57E+06
FD	-1.31E+06	2.63E+06	-1.30E+06	2.59E+06
L1	—	—	—	—
L3	-1.32E+06	2.61E+06	-1.31E+06	2.58E+06
L4	-1.32E+06	2.61E+06	-1.31E+06	2.58E+06
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.3
fhst_my (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–469. Time history of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
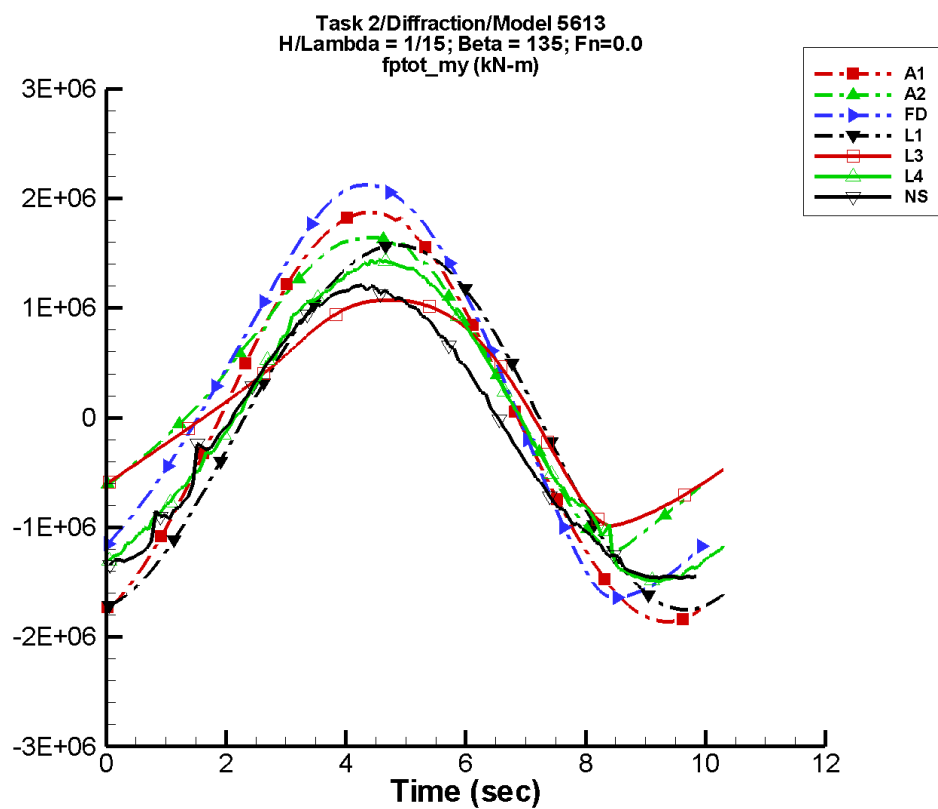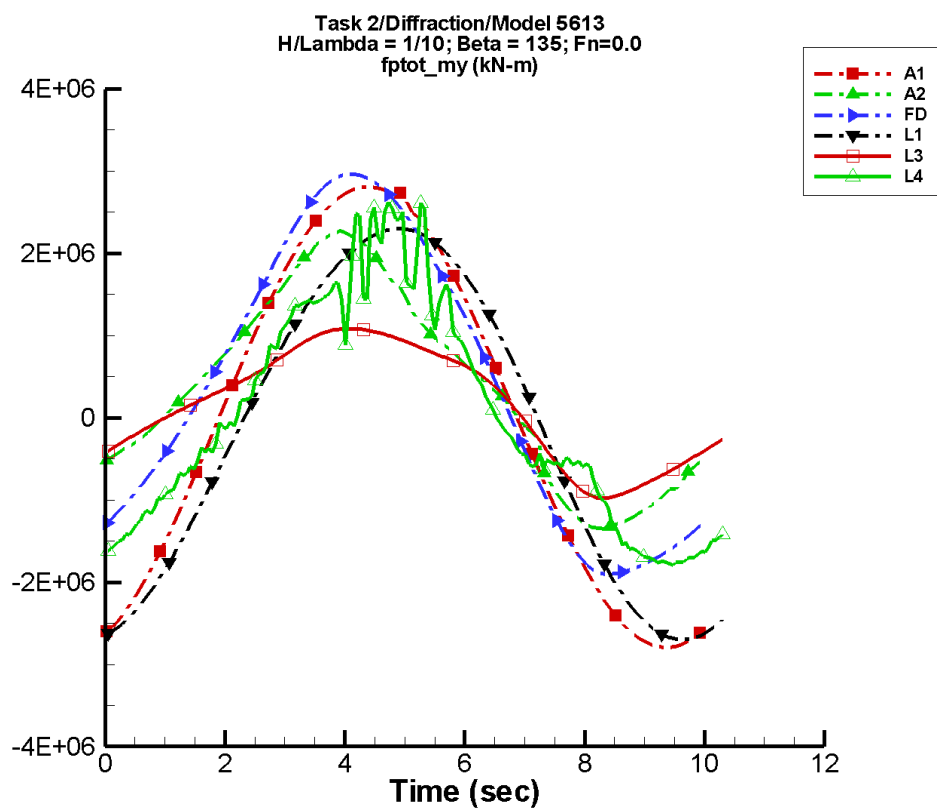
Table G–937. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-2.91E+03	2.30E+04	-8	8.42E+03	74
FD	-1.71E+04	3.50E+04	-9	1.82E+04	73
L1	—	—	—	—	—
L3	-2.19E+04	3.57E+04	-5	1.75E+04	84
L4	-2.19E+04	3.57E+04	-5	1.75E+04	84
NF	—	—	—	—	—
NS	-7.47E+04	931.	-3	1.65E+03	81

Table G–938. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-3.67E+04	1.79E+04	-3.57E+04	1.55E+04
FD	-7.33E+04	4.60E+03	-7.27E+04	4.55E+03
L1	—	—	—	—
L3	-7.86E+04	-98.9	-7.82E+04	-115.
L4	-7.86E+04	-98.9	-7.82E+04	-115.
NF	—	—	—	—
NS	-7.75E+04	-7.26E+04	-7.74E+04	-7.29E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–470. Time history of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
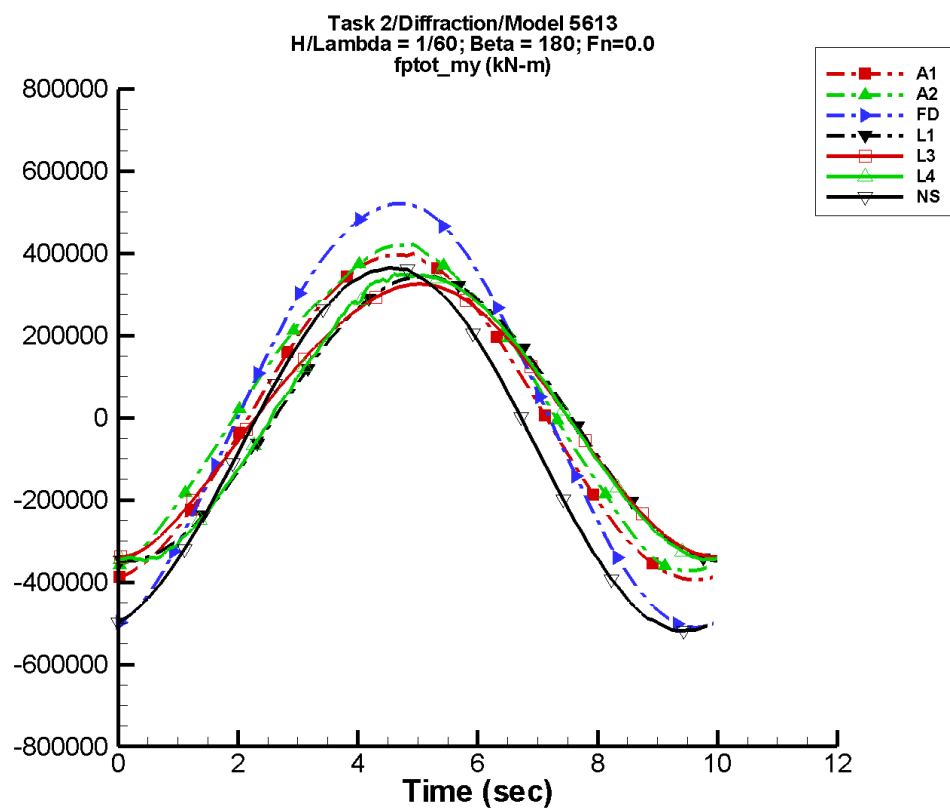
Table G–939. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-8.19E+04	2.02E+05	-9	7.70E+04	74
FD	-1.07E+05	1.80E+05	-8	8.44E+04	74
L1	—	—	—	—	—
L3	-1.08E+05	1.87E+05	-5	8.01E+04	83
L4	-1.08E+05	1.87E+05	-5	8.01E+04	83
NF	—	—	—	—	—
NS	-1.49E+05	1.08E+05	-7	7.32E+04	79

Table G–940. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-3.79E+05	6.40E+04	-3.72E+05	6.16E+04
FD	-3.71E+05	8.02E+03	-3.70E+05	7.30E+03
L1	—	—	—	—
L3	-3.77E+05	1.27E+04	-3.76E+05	1.26E+04
L4	-3.77E+05	1.27E+04	-3.76E+05	1.26E+04
NF	—	—	—	—
NS	-3.70E+05	-7.20E+04	-3.45E+05	-7.35E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–471. Time history of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–941. Coefficients of the Fourier fit $a_0+a_1 \sin{(\omega t + \Phi_1)}+a_2 \sin{(2\omega t + \Phi_2)}+$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	a_0	a_1	Φ_1	a_2	Φ_2
Code	(kN-m)	(kN-m)	(deg)	(kN-m)	(deg)
A1	—	—	—	—	—
A2	-1.21E+05	2.63E+05	-8	9.75E+04	75
FD	-1.40E+05	2.30E+05	-7	9.47E+04	77
L1	—	—	—	—	—
L3	-1.42E+05	2.47E+05	-4	9.22E+04	83
L4	-1.42E+05	2.47E+05	-4	9.22E+04	83
NF	—	—	—	—	—
NS	-2.72E+05	8.74E+04	-9	8.25E+04	79

Table G–942. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
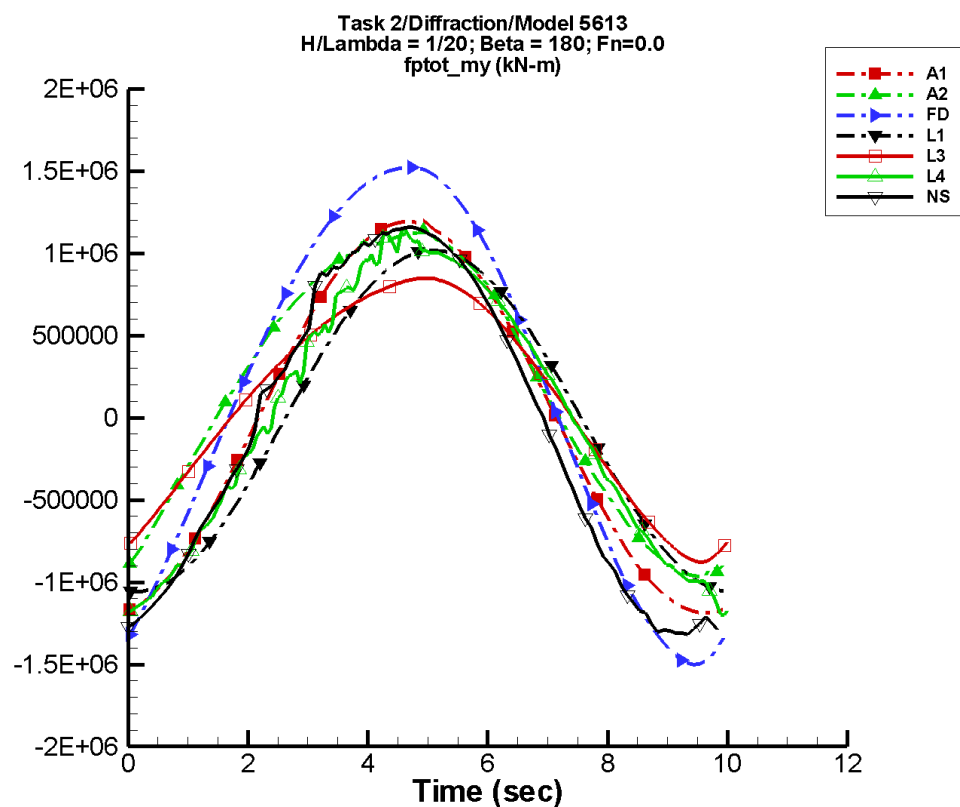
	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(kN-m)	(kN-m)	(kN-m)	(kN-m)
A1	—	—	—	—
A2	-4.61E+05	6.23E+04	-4.43E+05	5.90E+04
FD	-4.46E+05	1.08E+04	-4.30E+05	9.83E+03
L1	—	—	—	—
L3	-4.59E+05	2.61E+04	-4.52E+05	2.59E+04
L4	-4.59E+05	2.61E+04	-4.52E+05	2.59E+04
NF	—	—	—	—
NS	-4.70E+05	-1.93E+05	-4.54E+05	-1.93E+05

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–472. Time history of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
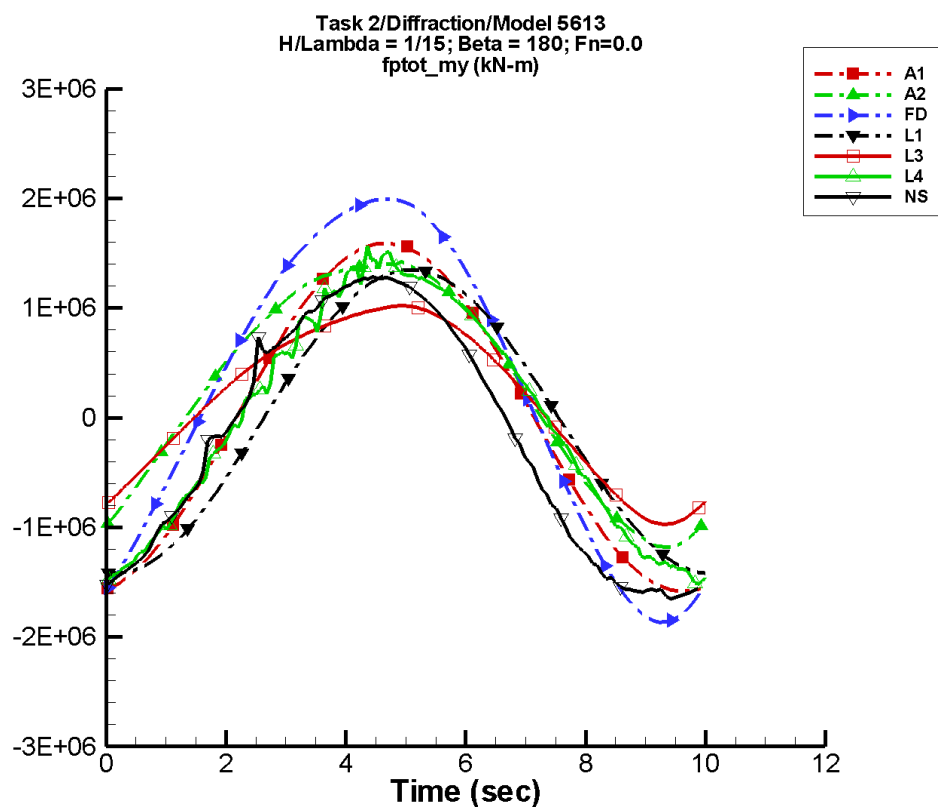
Table G–943. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$,
$F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	1.87E+05	5.86E+05	-10	4.52E+05	-112
FD	1.76E+05	5.86E+05	-9	4.92E+05	-105
L1	—	—	—	—	—
L3	1.91E+05	6.08E+05	-6	5.24E+05	-105
L4	1.91E+05	6.08E+05	-6	5.24E+05	-105
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–944. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/10$,
$\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-4.81E+05	1.95E+06	-3.23E+05	1.86E+06
FD	-3.71E+05	1.88E+06	-3.02E+05	1.80E+06
L1	—	—	—	—
L3	-3.82E+05	1.82E+06	-3.44E+05	1.86E+06
L4	-3.82E+05	1.82E+06	-3.44E+05	1.86E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–473. Time history of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
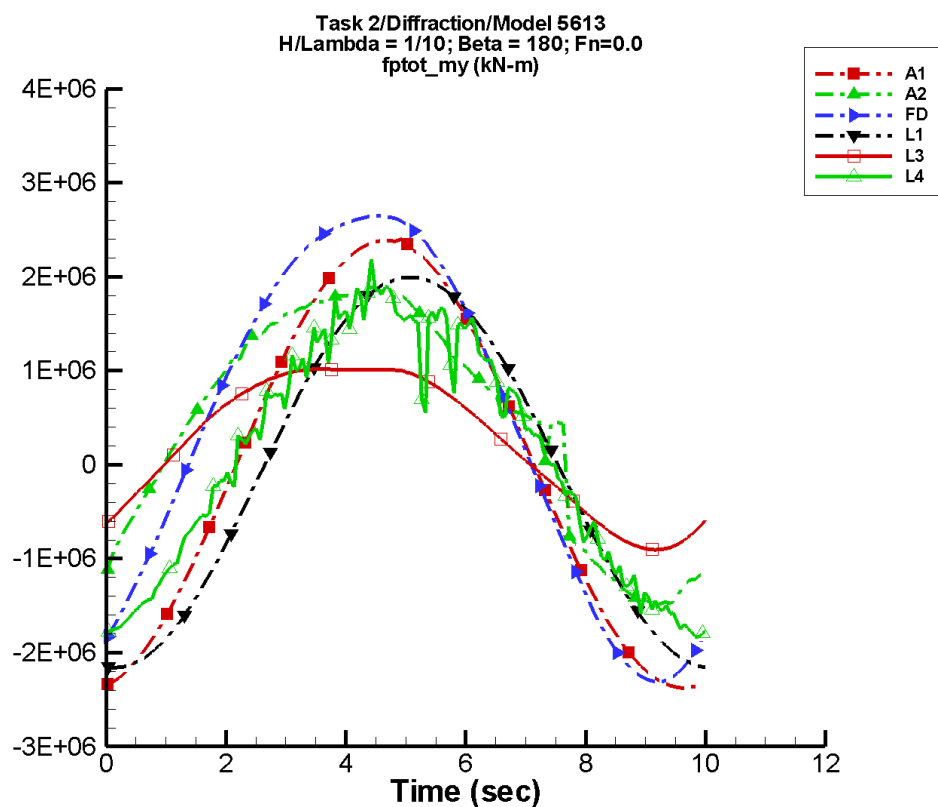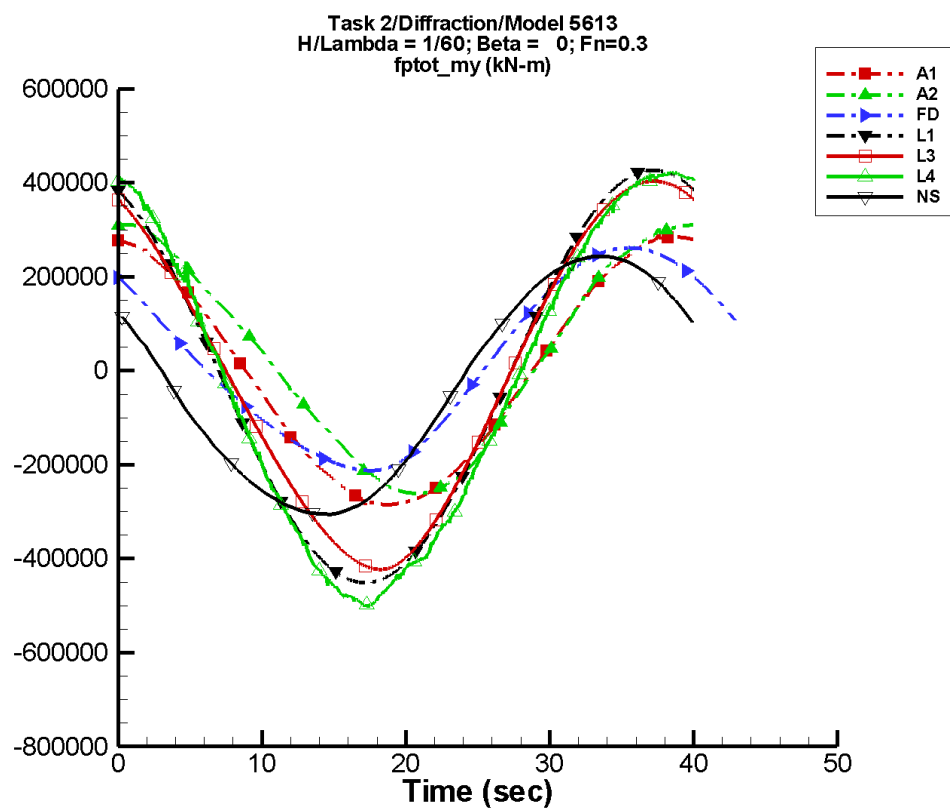
Table G–945. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-2.79E+03	7.37E+04	-107	1.64E+04	-119
FD	-1.69E+04	5.17E+04	-103	1.86E+04	-120
L1	—	—	—	—	—
L3	-2.21E+04	5.22E+04	-108	1.81E+04	-130
L4	-2.21E+04	5.22E+04	-108	1.81E+04	-130
NF	—	—	—	—	—
NS	-7.53E+04	1.68E+04	-92	3.08E+03	-83

Table G–946. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.09E+05	7.13E+04	-1.07E+05	6.84E+04
FD	-9.14E+04	2.26E+04	-9.09E+04	2.20E+04
L1	—	—	—	—
L3	-9.70E+04	1.86E+04	-9.67E+04	1.83E+04
L4	-9.70E+04	1.86E+04	-9.67E+04	1.83E+04
NF	—	—	—	—
NS	-9.74E+04	-5.92E+04	-9.73E+04	-5.94E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 135; Fn=0.3
fhst_my (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–474. Time history of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–947. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
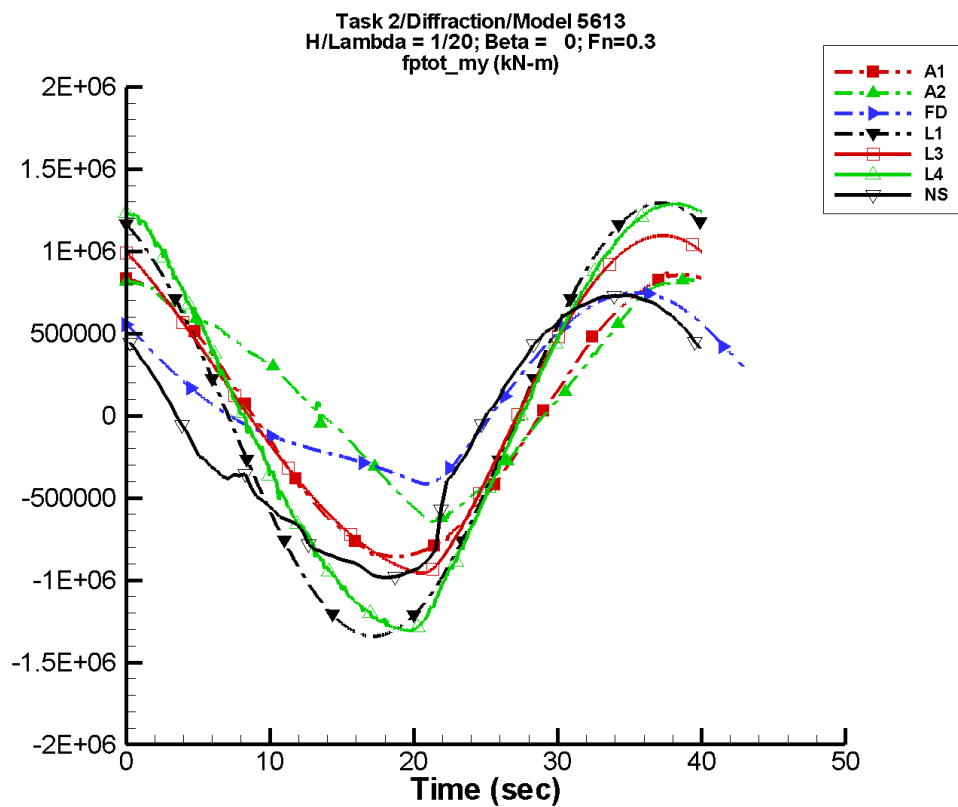
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-8.24E+04	3.78E+05	-97	8.63E+04	-71
FD	-1.04E+05	3.63E+05	-89	9.34E+04	-53
L1	—	—	—	—	—
L3	-1.08E+05	3.67E+05	-95	8.96E+04	-61
L4	-1.08E+05	3.67E+05	-95	8.96E+04	-61
NF	—	—	—	—	—
NS	-1.54E+05	3.01E+05	-90	9.13E+04	-65

Table G–948. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-6.03E+05	2.47E+05	-5.71E+05	2.40E+05
FD	-6.08E+05	2.18E+05	-5.84E+05	2.09E+05
L1	—	—	—	—
L3	-6.13E+05	2.25E+05	-6.07E+05	2.22E+05
L4	-6.13E+05	2.25E+05	-6.07E+05	2.22E+05
NF	—	—	—	—
NS	-6.12E+05	1.08E+05	-6.04E+05	1.05E+05

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–475. Time history of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
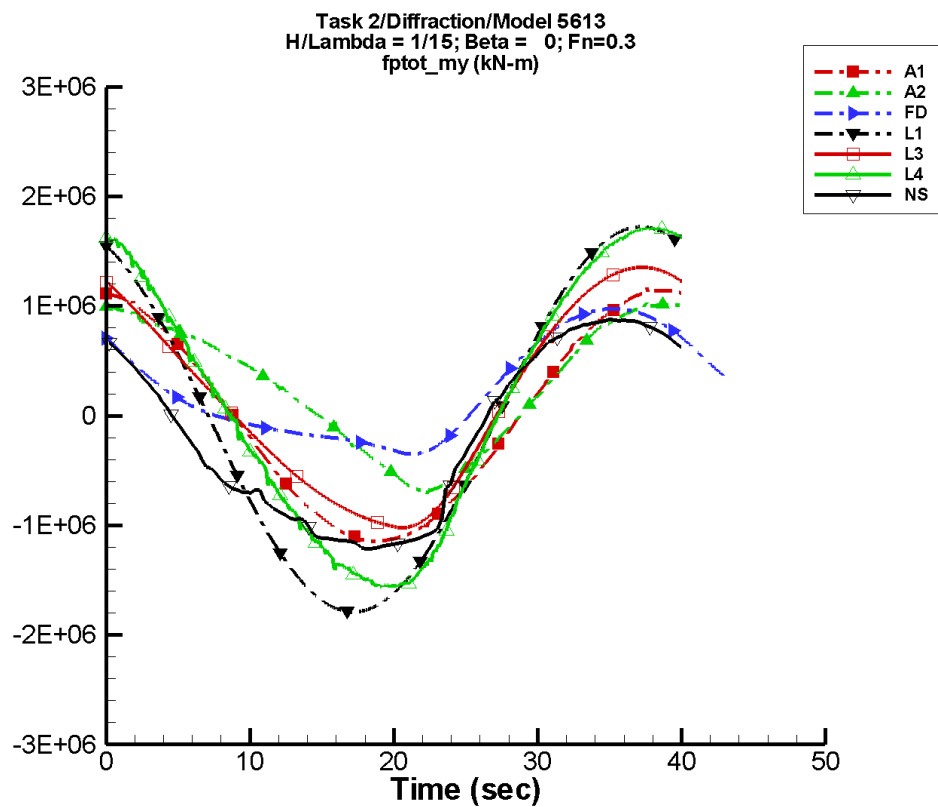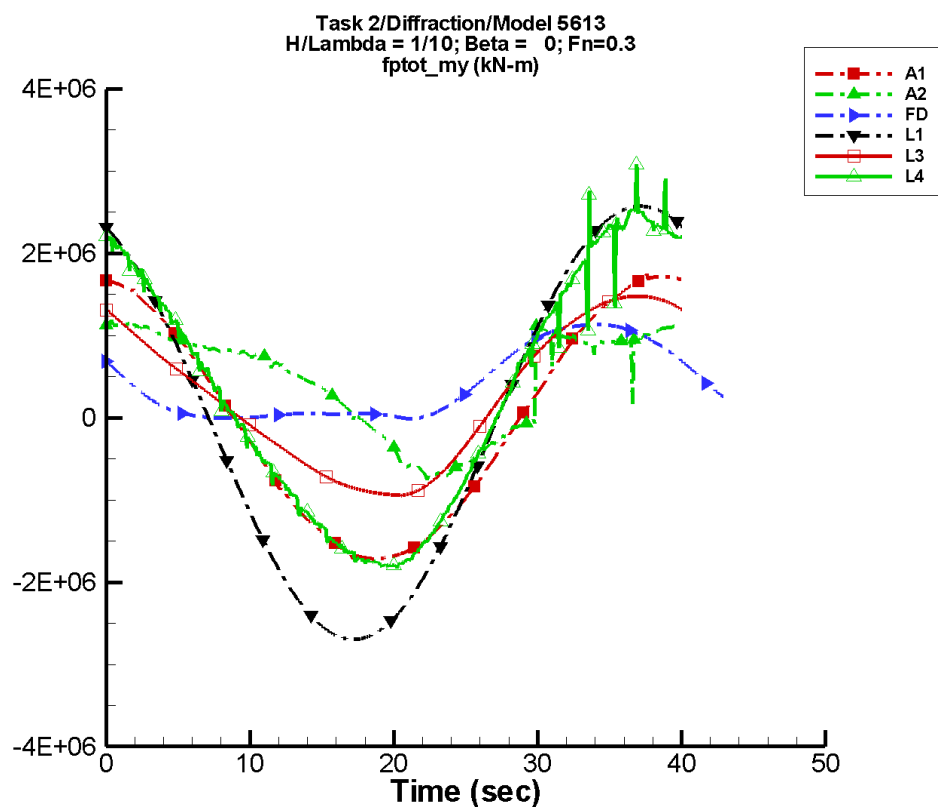
Table G–949. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-1.21E+05	6.68E+05	-96	1.97E+05	-28
FD	-1.41E+05	6.40E+05	-87	2.07E+05	-10
L1	—	—	—	—	—
L3	-1.41E+05	6.49E+05	-92	2.09E+05	-19
L4	-1.41E+05	6.49E+05	-92	2.09E+05	-19
NF	—	—	—	—	—
NS	-2.73E+05	4.98E+05	-86	1.96E+05	-16

Table G–950. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-9.85E+05	5.96E+05	-9.31E+05	5.59E+05
FD	-9.81E+05	5.49E+05	-9.33E+05	5.22E+05
L1	—	—	—	—
L3	-9.90E+05	5.66E+05	-9.77E+05	5.55E+05
L4	-9.90E+05	5.66E+05	-9.77E+05	5.55E+05
NF	—	—	—	—
NS	-9.85E+05	2.73E+05	-9.71E+05	2.67E+05

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–476. Time history of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
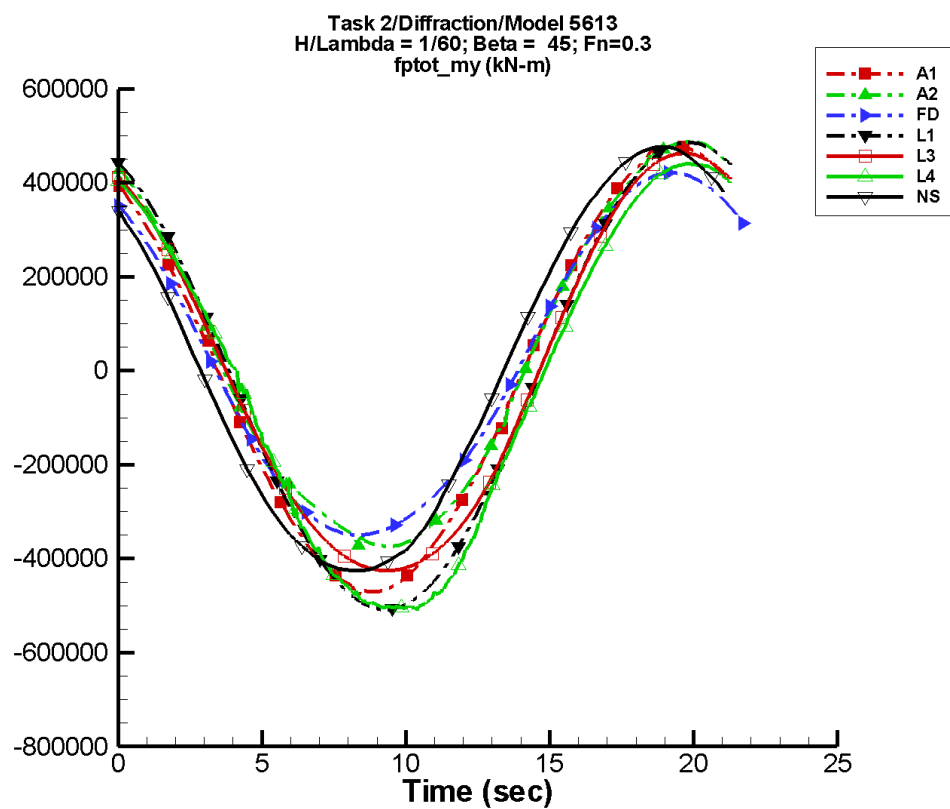
Table G–951. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	2.24E+05	1.72E+06	-99	5.39E+05	24
FD	1.81E+05	1.65E+06	-89	5.28E+05	49
L1	—	—	—	—	—
L3	1.67E+05	1.63E+06	-94	5.40E+05	36
L4	1.67E+05	1.63E+06	-94	5.40E+05	36
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–952. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.36E+06	2.65E+06	-1.32E+06	2.46E+06
FD	-1.31E+06	2.59E+06	-1.28E+06	2.41E+06
L1	—	—	—	—
L3	-1.31E+06	2.61E+06	-1.30E+06	2.50E+06
L4	-1.31E+06	2.61E+06	-1.30E+06	2.50E+06
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 180; Fn=0.3
fhst_my (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–477. Time history of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–953. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
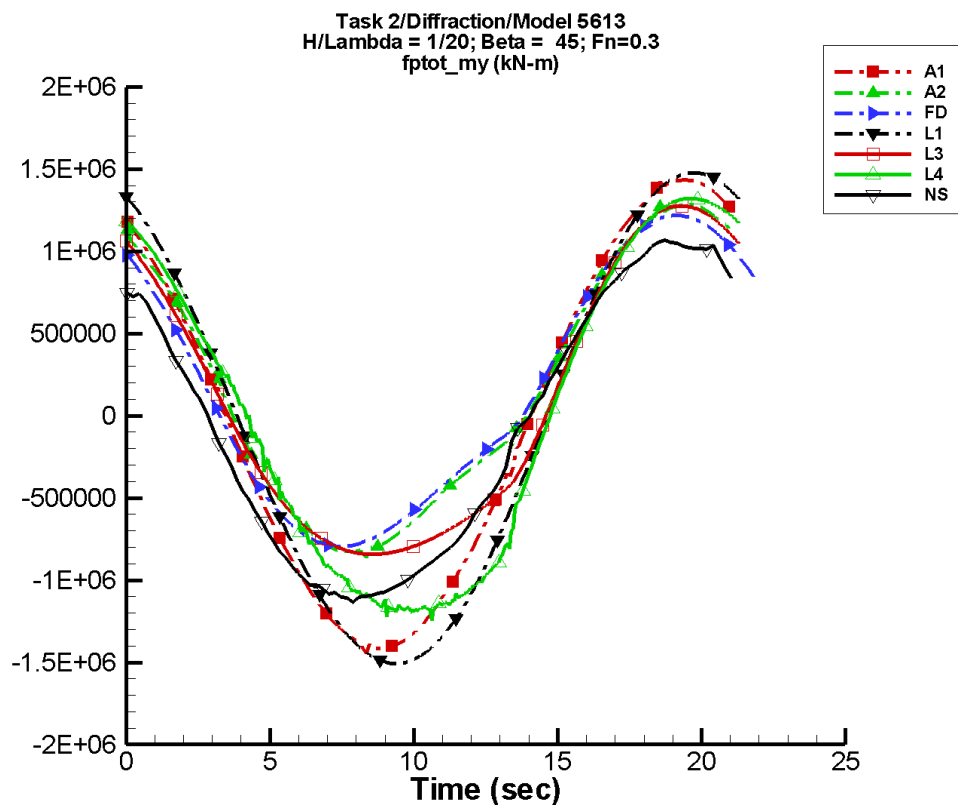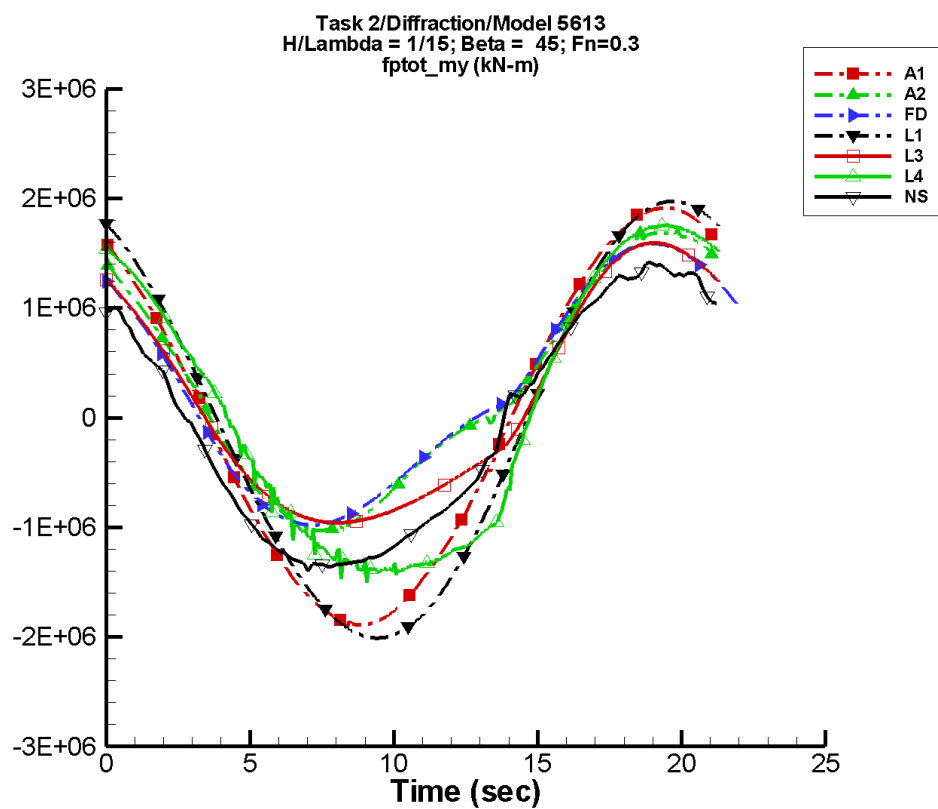
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-2.50E+03	5.12E+04	-135	2.56E+04	103
FD	-1.65E+04	4.22E+04	-177	1.98E+04	69
L1	—	—	—	—	—
L3	-2.22E+04	4.36E+04	-155	1.87E+04	112
L4	-2.22E+04	4.36E+04	-155	1.87E+04	112
NF	—	—	—	—	—
NS	-7.53E+04	1.50E+04	-102	4.10E+03	173

Table G–954. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-7.90E+04	6.37E+04	-7.20E+04	5.53E+04
FD	-8.40E+04	1.73E+04	-7.92E+04	1.69E+04
L1	—	—	—	—
L3	-8.96E+04	1.26E+04	-8.79E+04	1.26E+04
L4	-8.96E+04	1.26E+04	-8.79E+04	1.26E+04
NF	—	—	—	—
NS	-9.43E+04	-6.11E+04	-9.37E+04	-6.14E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–478. Time history of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
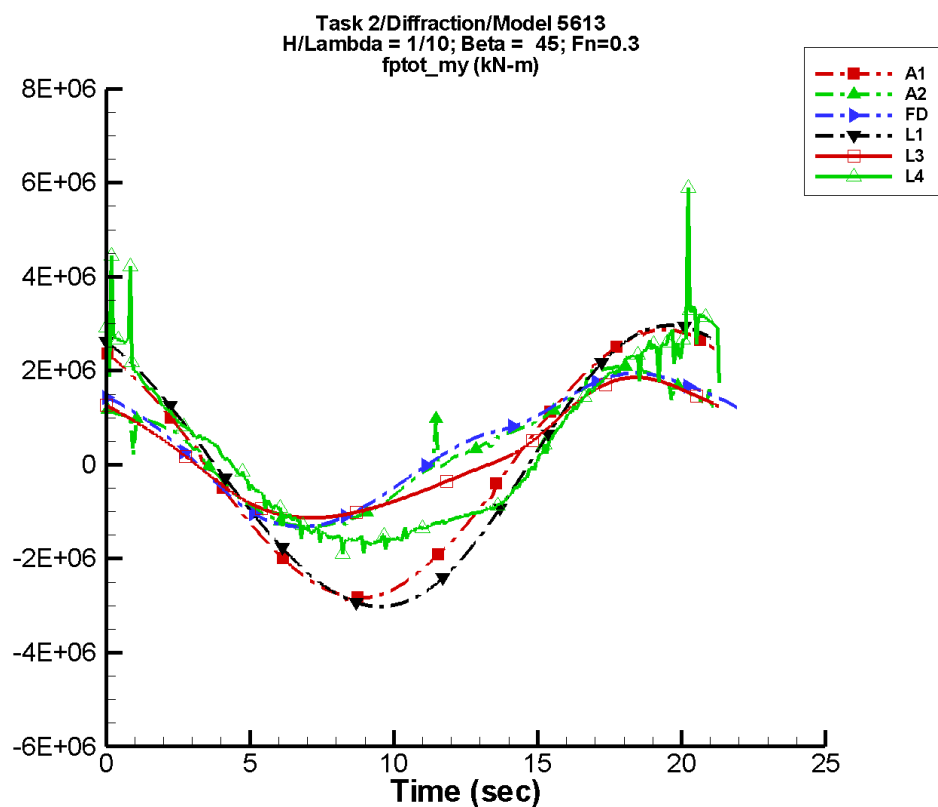
Table G–955. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-8.71E+04	3.29E+05	-122	9.41E+04	-172
FD	-1.10E+05	3.23E+05	-146	9.33E+04	144
L1	—	—	—	—	—
L3	-1.11E+05	3.23E+05	-125	8.24E+04	-175
L4	-1.11E+05	3.23E+05	-125	8.24E+04	-175
NF	—	—	—	—	—
NS	-1.60E+05	2.87E+05	-104	9.18E+04	-147

Table G–956. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-5.78E+05	2.05E+05	-5.74E+05	1.94E+05
FD	-5.85E+05	1.61E+05	-5.72E+05	1.54E+05
L1	—	—	—	—
L3	-5.91E+05	1.61E+05	-5.89E+05	1.59E+05
L4	-5.91E+05	1.61E+05	-5.89E+05	1.59E+05
NF	—	—	—	—
NS	-5.98E+05	8.18E+04	-5.97E+05	8.05E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–479. Time history of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
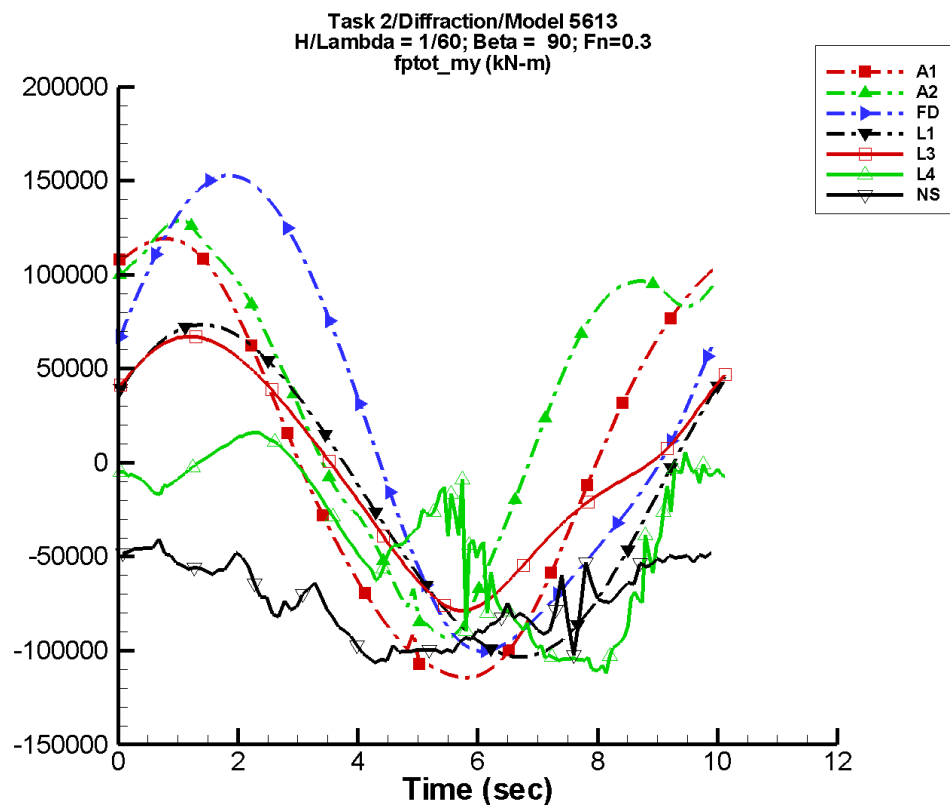
Table G–957. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-1.25E+05	6.24E+05	-113	5.94E+04	-133
FD	-1.40E+05	5.98E+05	-135	6.02E+04	-175
L1	—	—	—	—	—
L3	-1.34E+05	5.96E+05	-116	5.00E+04	-141
L4	-1.34E+05	5.96E+05	-116	5.00E+04	-141
NF	—	—	—	—	—
NS	-2.71E+05	5.15E+05	-90	5.76E+04	-87

Table G–958. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-8.83E+05	4.56E+05	-8.62E+05	4.36E+05
FD	-8.87E+05	4.14E+05	-8.19E+05	4.00E+05
L1	—	—	—	—
L3	-8.94E+05	4.20E+05	-8.70E+05	4.16E+05
L4	-8.94E+05	4.20E+05	-8.70E+05	4.16E+05
NF	—	—	—	—
NS	-9.91E+05	2.14E+05	-9.58E+05	2.11E+05

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–480. Time history of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
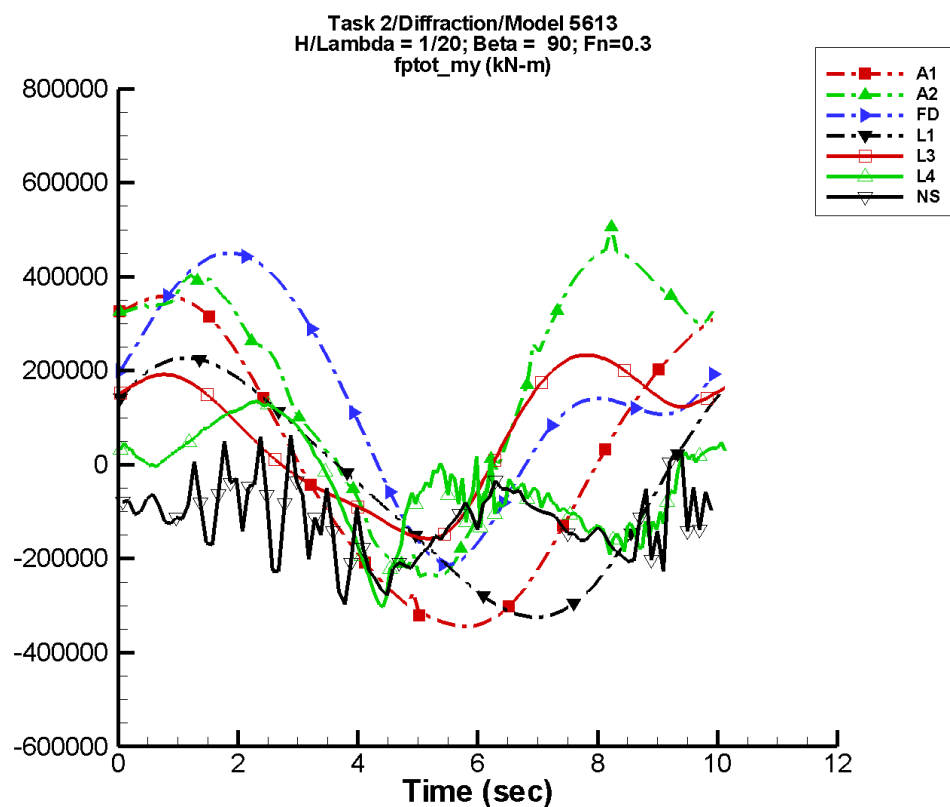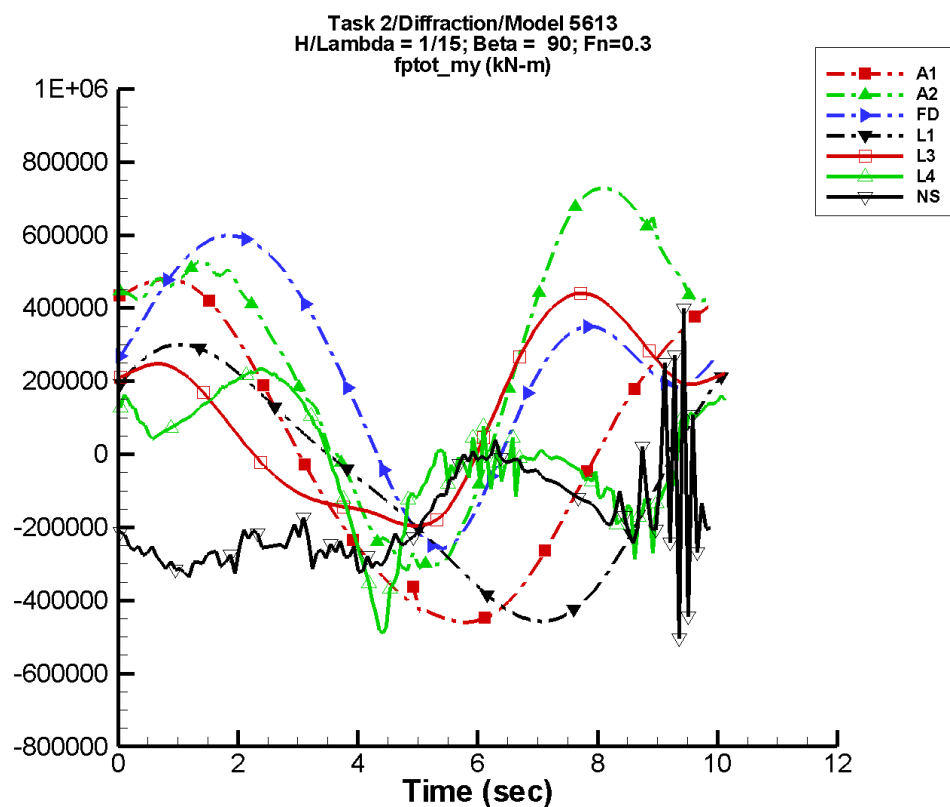
Table G–959. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	3.07E+05	1.67E+06	-122	5.45E+05	-38
FD	1.87E+05	1.47E+06	-140	4.02E+05	-75
L1	—	—	—	—	—
L3	1.74E+05	1.48E+06	-119	4.03E+05	-35
L4	1.74E+05	1.48E+06	-119	4.03E+05	-35
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–960. Minimum and maximum of of M_y^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.29E+06	2.42E+06	-1.22E+06	2.36E+06
FD	-1.24E+06	2.08E+06	-1.17E+06	1.92E+06
L1	—	—	—	—
L3	-1.25E+06	2.07E+06	-1.22E+06	1.99E+06
L4	-1.25E+06	2.07E+06	-1.22E+06	1.99E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–481. Time history of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–961. Coefficients of the Fourier fit $a_0 + a_1 \sin (\omega t + \Phi_1) + a_2 \sin (2\omega t + \Phi_2) +$ $\cdots$ of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
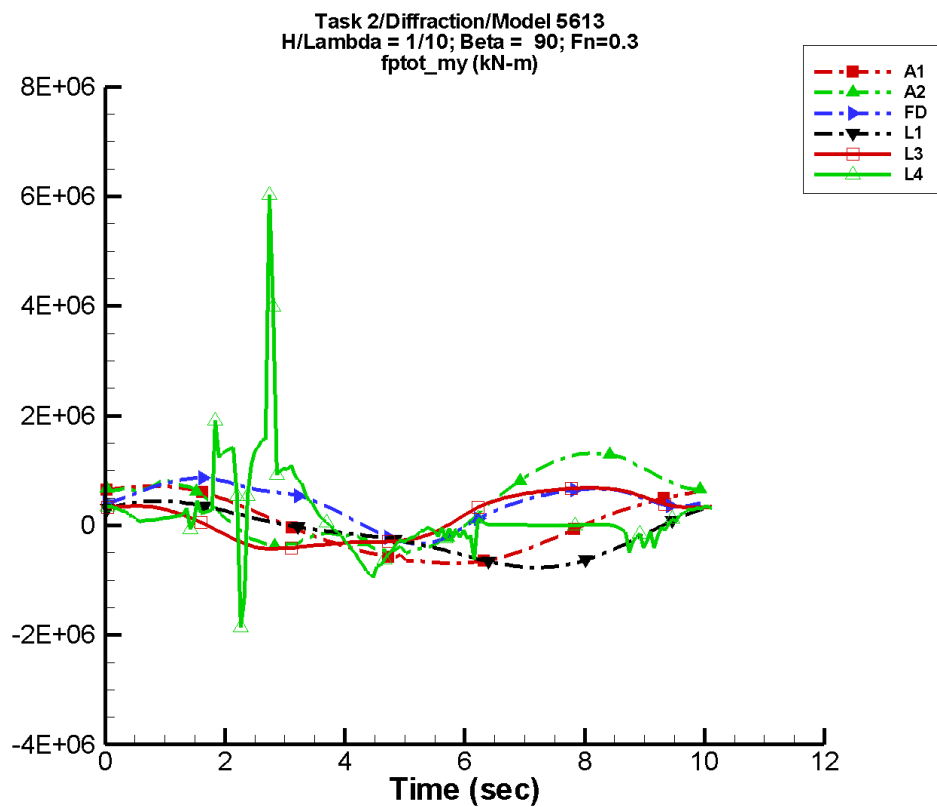
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	3.47E-04	8.93E-04	-117	1.13E-03	-99
FD	2.51E-04	3.27E-04	-136	2.96E-04	163
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	2.68E-03	8.55E-03	114	2.93E-03	50

Table G–962. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-6.59E-03	8.99E-03	-1.87E-03	3.85E-03
FD	-1.50E-03	1.50E-03	-7.23E-04	8.13E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-4.56E-02	4.39E-02	-1.59E-02	2.08E-02

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–482. Time history of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
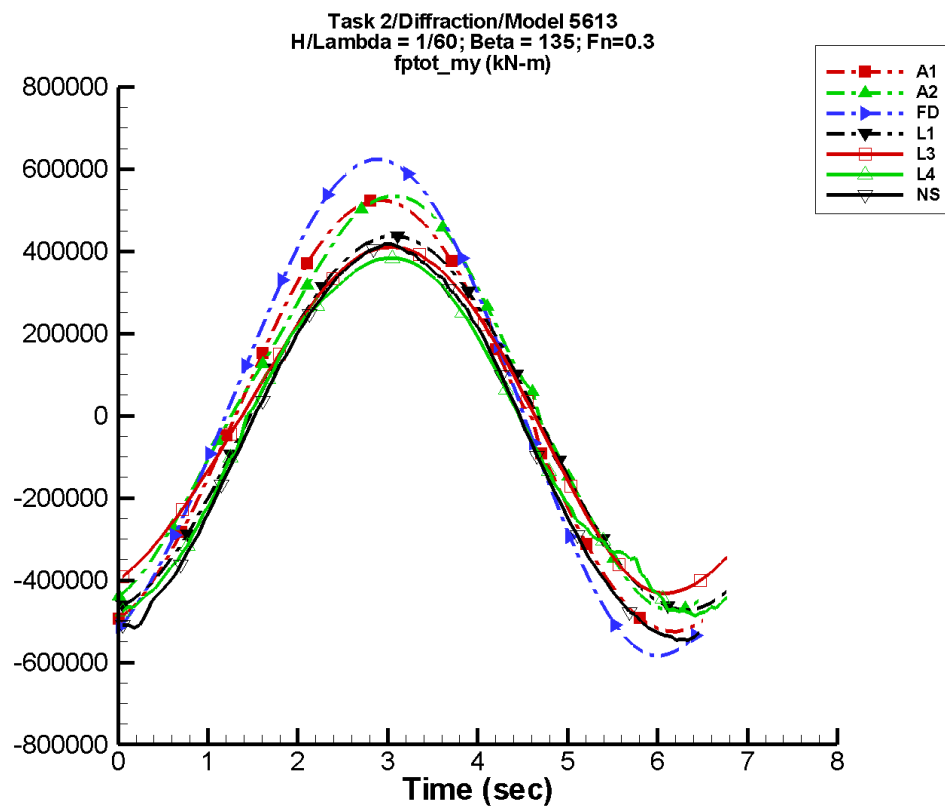
Table G–963. Coefficients of the Fourier fit $a_0+a_1\sin(\omega t+\Phi_1)+a_2\sin(2\omega t+\Phi_2)+\cdots$ of M_z^{hst} for one period for $H/\lambda=1/20$, $\lambda/L=1$, $\beta=0°$, $F_n=0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-1.24E+03	3.42E+03	123	5.00E+03	8
FD	1.73E-04	5.61E-04	26	3.70E-04	143
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-4.03E-03	6.78E-03	41	7.29E-03	0

Table G–964. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda=1/20$, $\lambda/L=1$, $\beta=0°$, $F_n=0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.69E+05	2.10E+05	-2.26E+04	2.80E+04
FD	-2.50E-03	2.50E-03	-1.32E-03	1.47E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-7.20E-02	8.19E-02	-2.50E-02	3.99E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta =   0; Fn=0.0
fhst_mz (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–483. Time history of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
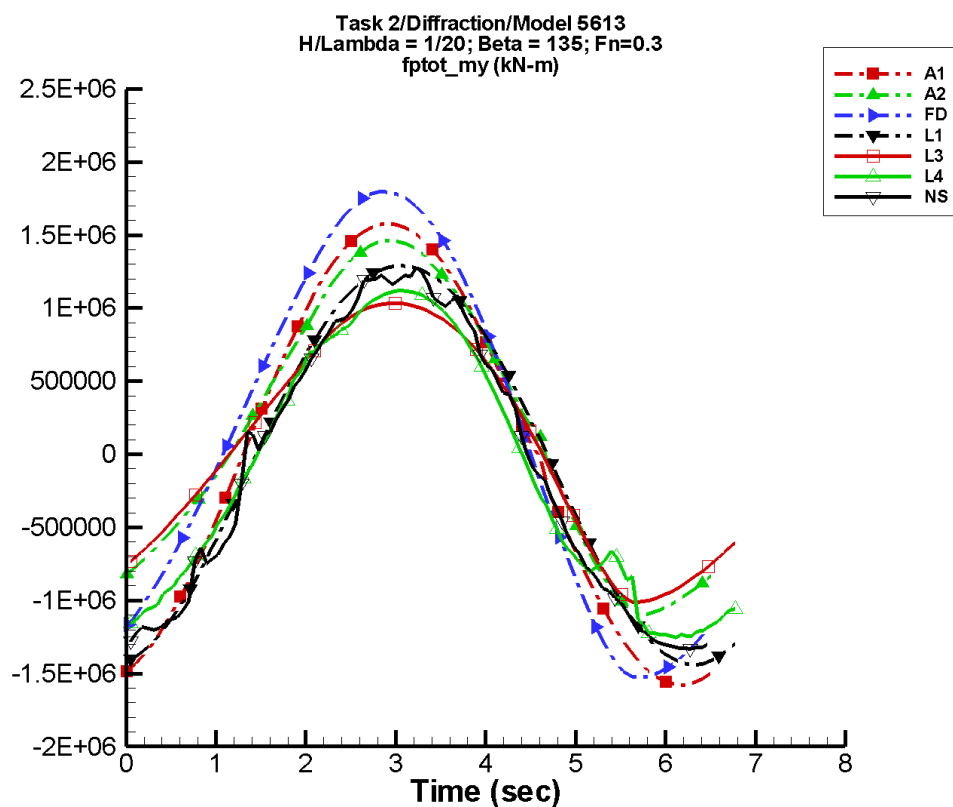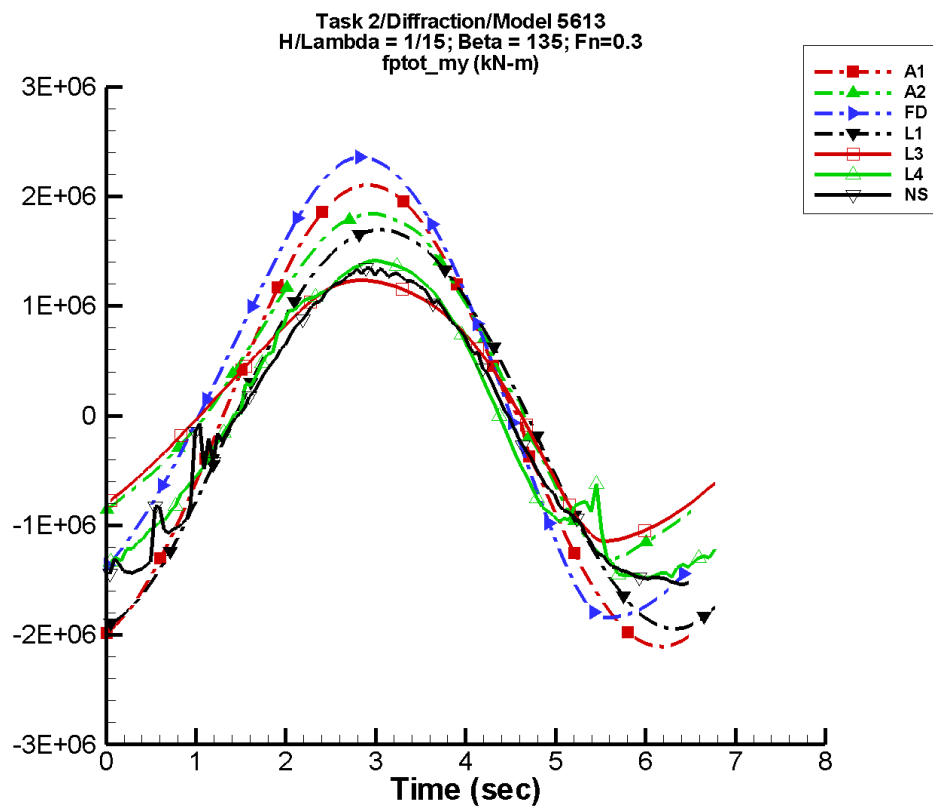
Table G–965. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	1.12E+03	2.39E+03	70	2.77E+03	45
FD	-3.42E-04	9.31E-04	35	4.39E-04	175
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.05E-02	4.33E-03	-56	1.07E-02	-171

Table G–966. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-0.105	2.12E+05	-2.42E+03	2.83E+04
FD	-3.50E-03	2.50E-03	-2.19E-03	8.23E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.121	0.105	-5.18E-02	1.81E-02

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–484. Time history of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
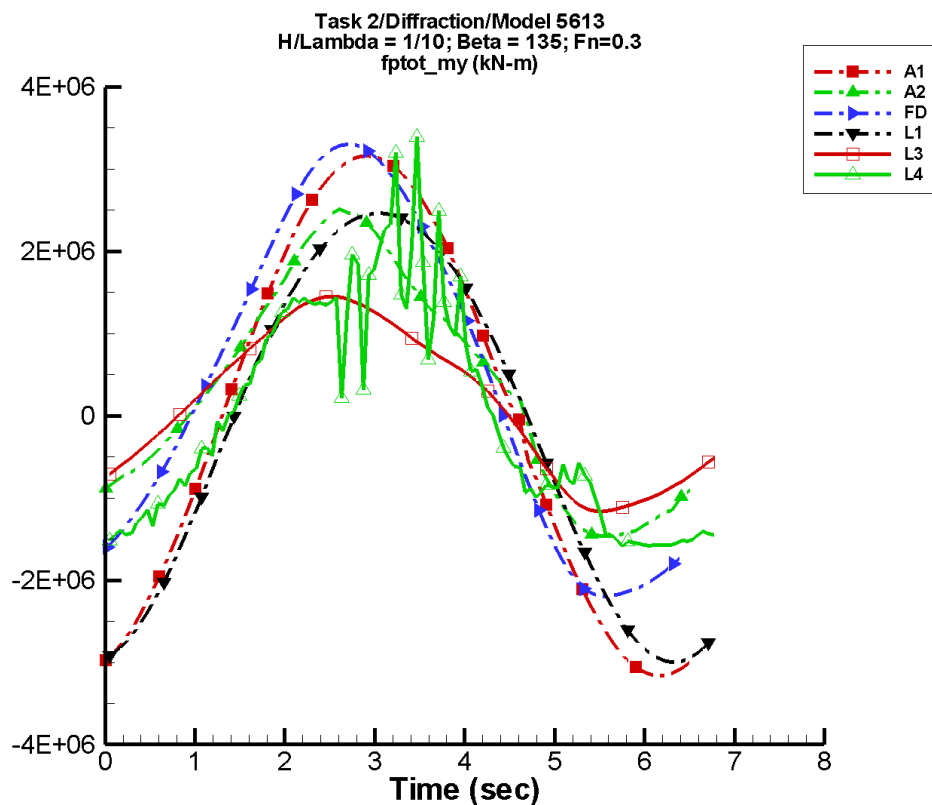
Table G–967. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-71.9	163.	-53	234.	-27
FD	3.60E-04	1.38E-03	138	4.42E-04	-138
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–968. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.09E+04	5.17E+03	-1.50E+03	638.
FD	-3.50E-03	3.50E-03	-1.43E-03	2.70E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 45; Fn=0.0
fhst_mz (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–485. Time history of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
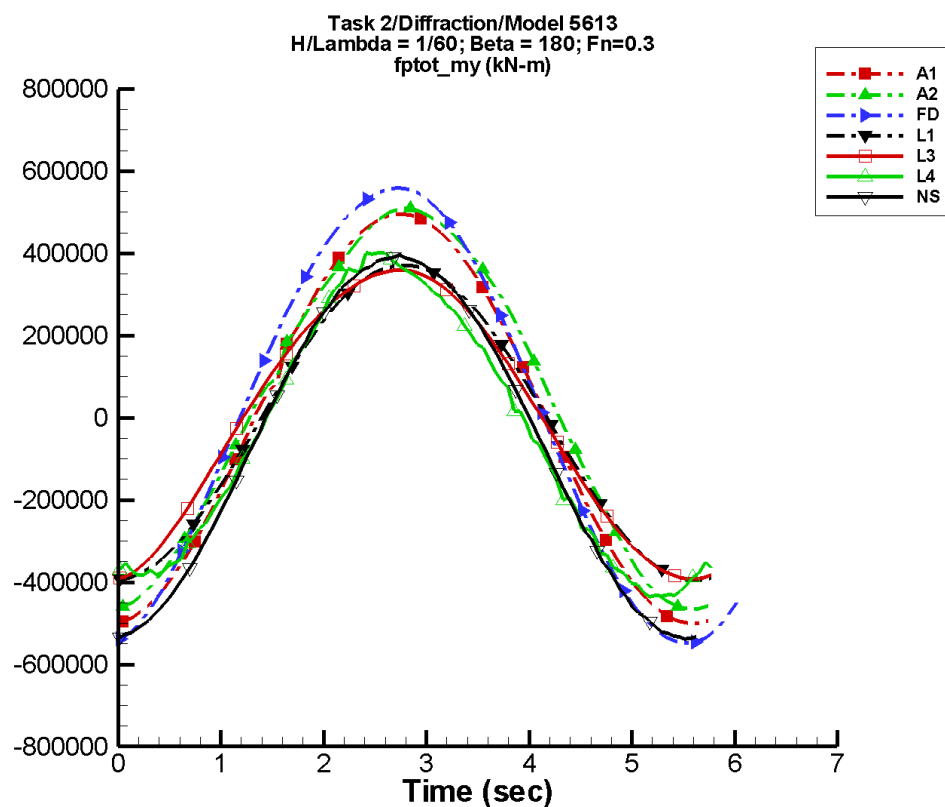
Table G–969. Coefficients of the Fourier fit $a_0+a_1 \sin(\omega t + \Phi_1)+a_2 \sin(2\omega t + \Phi_2)+$ $\cdots$ of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	479.	1.85E+03	4	5.28E+03	90
FD	-36.9	712.	-160	5.46E+03	103
L1	—	—	—	—	—
L3	-35.1	759.	-157	5.39E+03	110
L4	-35.1	759.	-157	5.39E+03	110
NF	—	—	—	—	—
NS	-1.47	237.	-176	5.79E+03	95

Table G–970. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

| | Unfiltered | | Filtered | |
| | Minimum | Maximum | Minimum | Maximum |
Code	(kN-m)	(kN-m)	(kN-m)	(kN-m)
A1	—	—	—	—
A2	-1.69E+04	1.55E+04	-1.44E+04	1.38E+04
FD	-5.40E+03	6.16E+03	-5.26E+03	5.86E+03
L1	—	—	—	—
L3	-5.45E+03	6.02E+03	-5.41E+03	5.93E+03
L4	-5.45E+03	6.02E+03	-5.41E+03	5.93E+03
NF	—	—	—	—
NS	-5.95E+03	5.85E+03	-5.97E+03	5.61E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 45; Fn=0.0
fhst_mz (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.
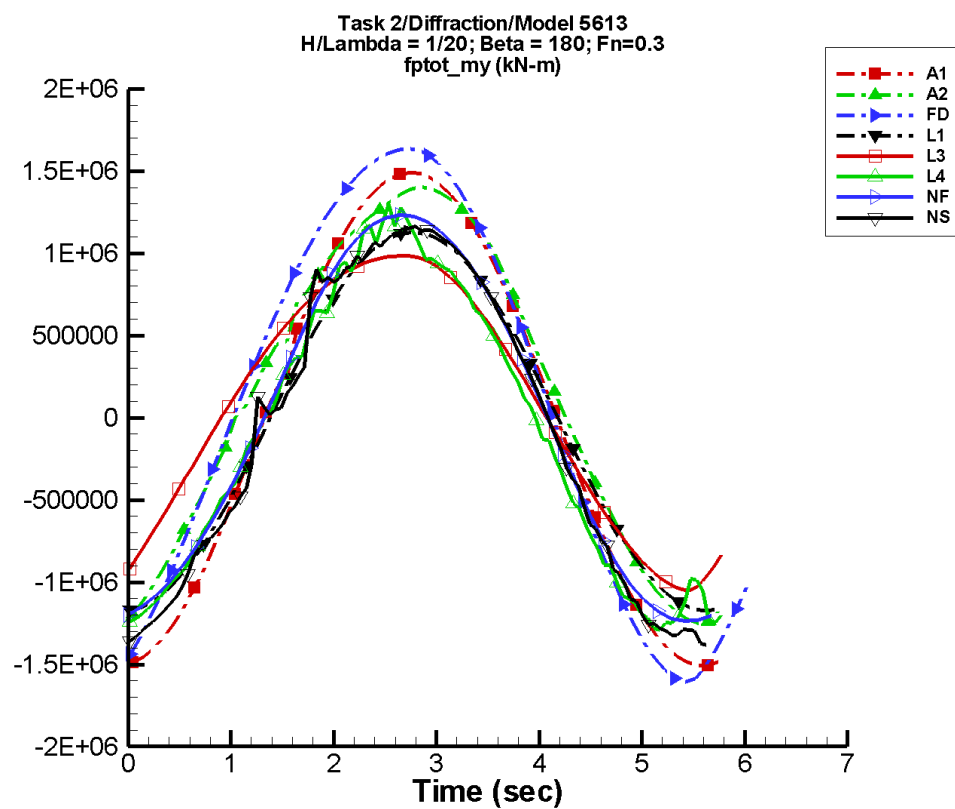
Figure G–486. Time history of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–971. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	289.	1.80E+04	-172	4.31E+04	88
FD	-899.	1.80E+04	-171	4.44E+04	89
L1	—	—	—	—	—
L3	-282.	1.86E+04	-168	4.34E+04	96
L4	-282.	1.86E+04	-168	4.34E+04	96
NF	—	—	—	—	—
NS	281.	1.05E+04	-174	4.82E+04	88

Table G–972. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-2.10E+05	1.41E+05	-7.02E+04	5.10E+04
FD	-5.35E+04	5.03E+04	-5.23E+04	4.86E+04
L1	—	—	—	—
L3	-5.30E+04	5.05E+04	-5.25E+04	4.98E+04
L4	-5.30E+04	5.05E+04	-5.25E+04	4.98E+04
NF	—	—	—	—
NS	-5.33E+04	5.11E+04	-5.36E+04	4.89E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 45; Fn=0.0
fhst_mz (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.
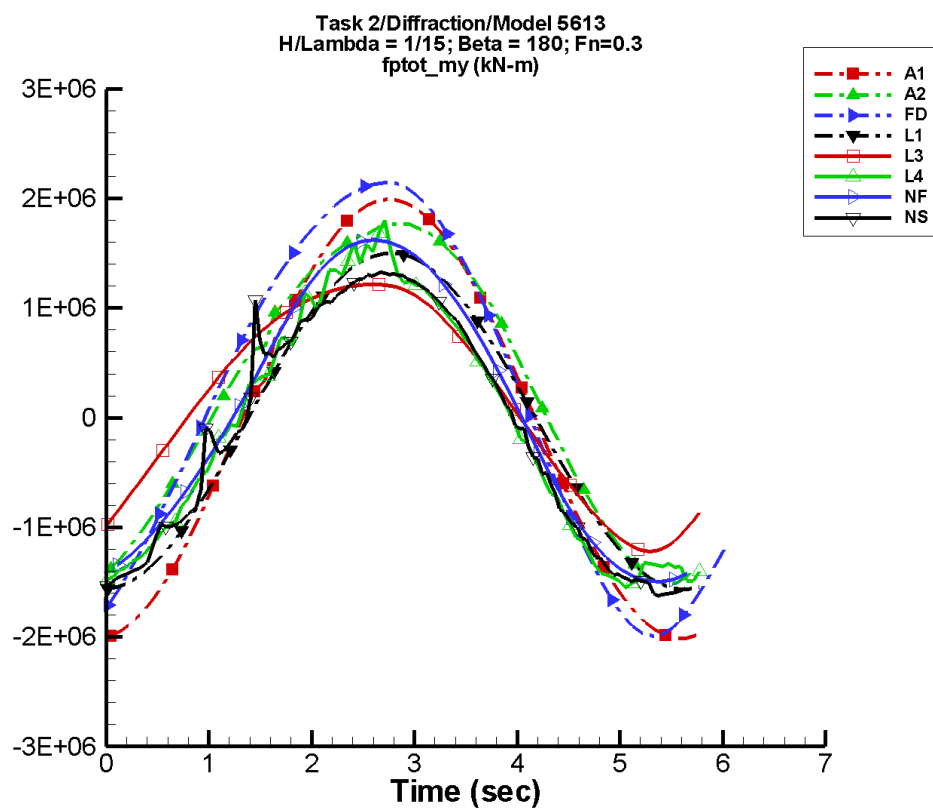
Figure G–487. Time history of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
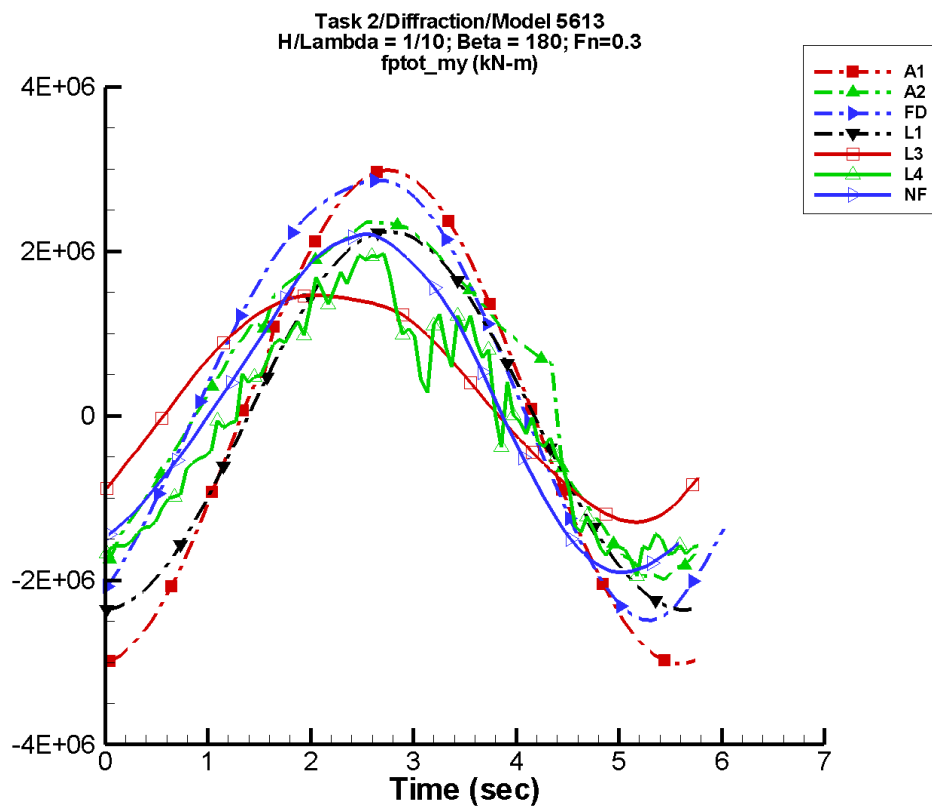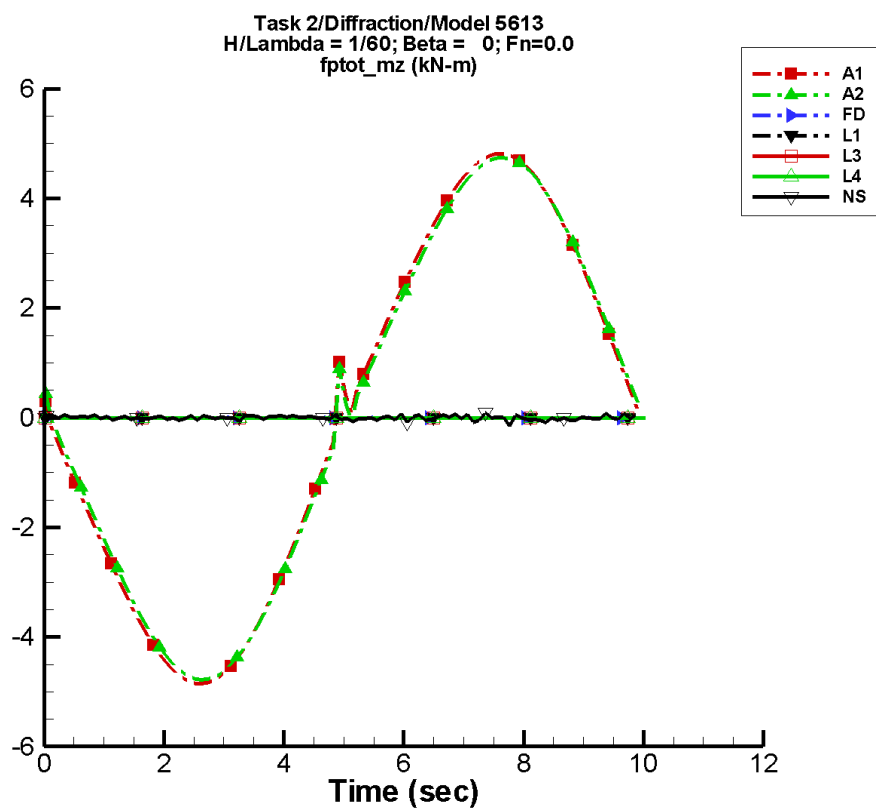
Table G–973. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-149.	3.70E+04	-179	6.02E+04	92
FD	-1.75E+03	4.07E+04	-176	6.90E+04	88
L1	—	—	—	—	—
L3	-145.	4.25E+04	-173	6.62E+04	95
L4	-145.	4.25E+04	-173	6.62E+04	95
NF	—	—	—	—	—
NS	151.	1.89E+04	180	8.13E+04	79

Table G–974. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-9.36E+04	9.45E+04	-7.44E+04	8.03E+04
FD	-9.58E+04	8.67E+04	-9.37E+04	8.26E+04
L1	—	—	—	—
L3	-9.51E+04	8.53E+04	-9.42E+04	8.40E+04
L4	-9.51E+04	8.53E+04	-9.42E+04	8.40E+04
NF	—	—	—	—
NS	-9.64E+04	8.68E+04	-9.61E+04	8.55E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–488. Time history of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–975. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	806.	1.27E+05	175	1.04E+05	99
FD	-1.75E+03	1.23E+05	178	1.10E+05	93
L1	—	—	—	—	—
L3	-58.6	1.24E+05	-178	1.07E+05	100
L4	-58.6	1.24E+05	-178	1.07E+05	100
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–976. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

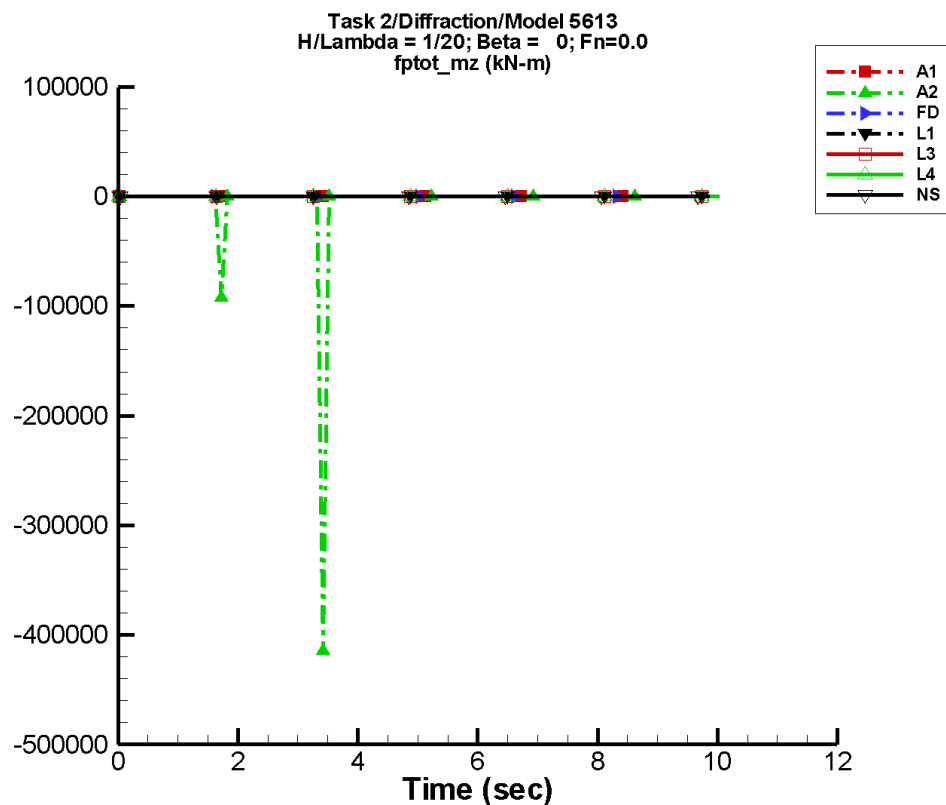| Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-2.11E+05	1.68E+05	-2.04E+05	1.51E+05
FD	-2.06E+05	1.48E+05	-2.04E+05	1.44E+05
L1	—	—	—	—
L3	-2.03E+05	1.44E+05	-2.02E+05	1.42E+05
L4	-2.03E+05	1.44E+05	-2.02E+05	1.42E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.0
fhst_mz (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–489. Time history of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–977. Coefficients of the Fourier fit $a_0+a_1 \sin (\omega t + \Phi_1)+a_2 \sin (2\omega t + \Phi_2)+$ $\cdots$ of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
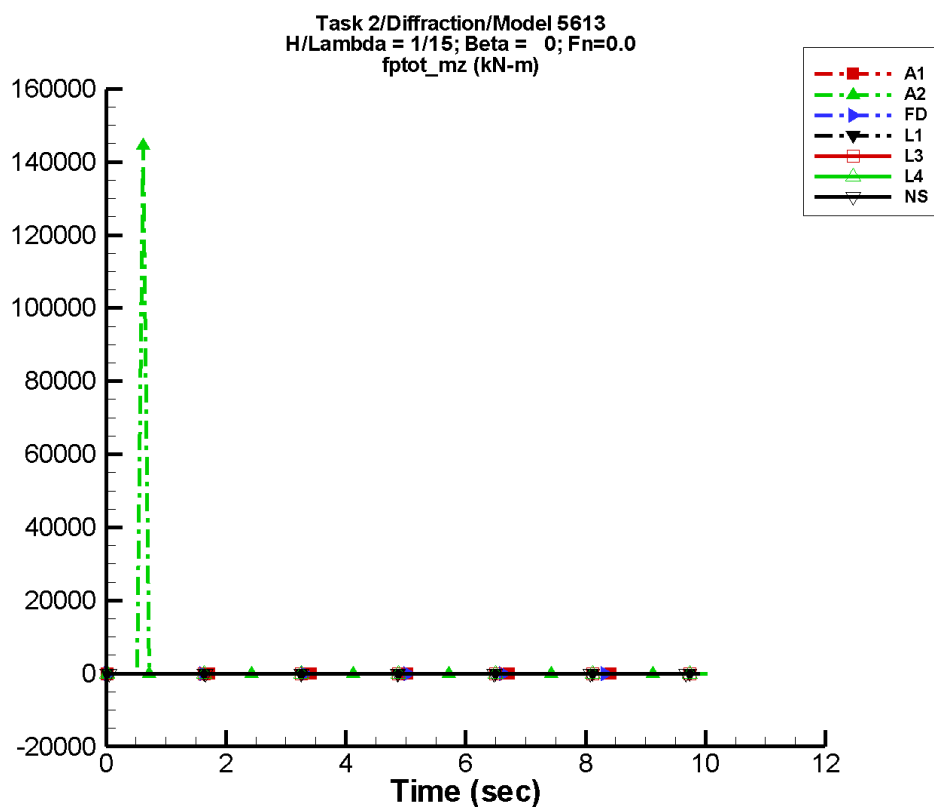
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	4.23	2.77E+03	75	2.36E+03	-29
FD	-26.3	931.	77	4.53E+03	-14
L1	—	—	—	—	—
L3	-3.36E-02	982.	84	4.45E+03	-9
L4	-3.36E-02	982.	84	4.45E+03	-9
NF	—	—	—	—	—
NS	1.20	33.1	89	1.41E+03	-8

Table G–978. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-7.59E+03	7.65E+03	-6.94E+03	6.94E+03
FD	-5.77E+03	5.77E+03	-5.47E+03	5.48E+03
L1	—	—	—	—
L3	-5.58E+03	5.58E+03	-5.48E+03	5.48E+03
L4	-5.58E+03	5.58E+03	-5.48E+03	5.48E+03
NF	—	—	—	—
NS	-1.45E+03	1.42E+03	-1.39E+03	1.37E+03

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–490. Time history of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

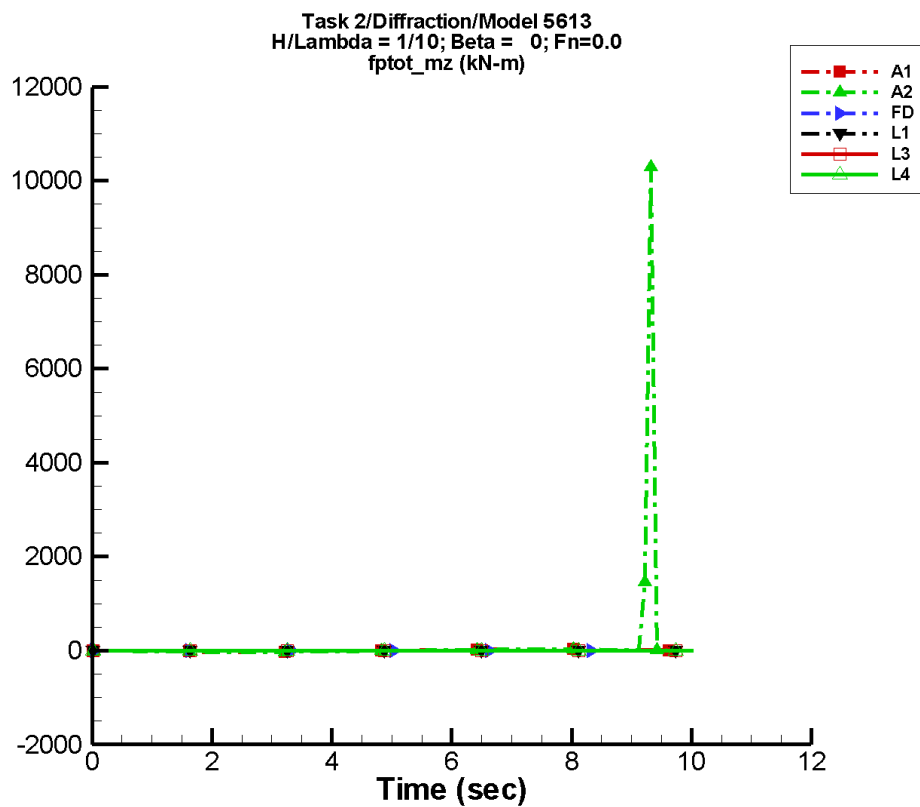Table G–979. Coefficients of the Fourier fit $a_0+a_1\sin\left(\omega t+\Phi_1\right)+a_2\sin\left(2\omega t+\Phi_2\right)+$ $\cdots$ of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-2.34E+03	2.10E+04	70	2.51E+04	-21
FD	-631.	2.18E+04	78	2.50E+04	-11
L1	—	—	—	—	—
L3	-78.8	2.19E+04	84	2.50E+04	-11
L4	-78.8	2.19E+04	84	2.50E+04	-11
NF	—	—	—	—	—
NS	831.	7.13E+03	90	5.68E+03	-16

Table G–980. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

| | Unfiltered | | Filtered | |
| | Minimum | Maximum | Minimum | Maximum |
Code	(kN-m)	(kN-m)	(kN-m)	(kN-m)
A1	—	—	—	—
A2	-2.64E+05	1.86E+05	-4.51E+04	4.47E+04
FD	-5.14E+04	5.14E+04	-4.89E+04	4.90E+04
L1	—	—	—	—
L3	-5.05E+04	5.05E+04	-4.95E+04	4.95E+04
L4	-5.05E+04	5.05E+04	-4.95E+04	4.95E+04
NF	—	—	—	—
NS	-1.52E+04	1.48E+04	-1.45E+04	1.42E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–491. Time history of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
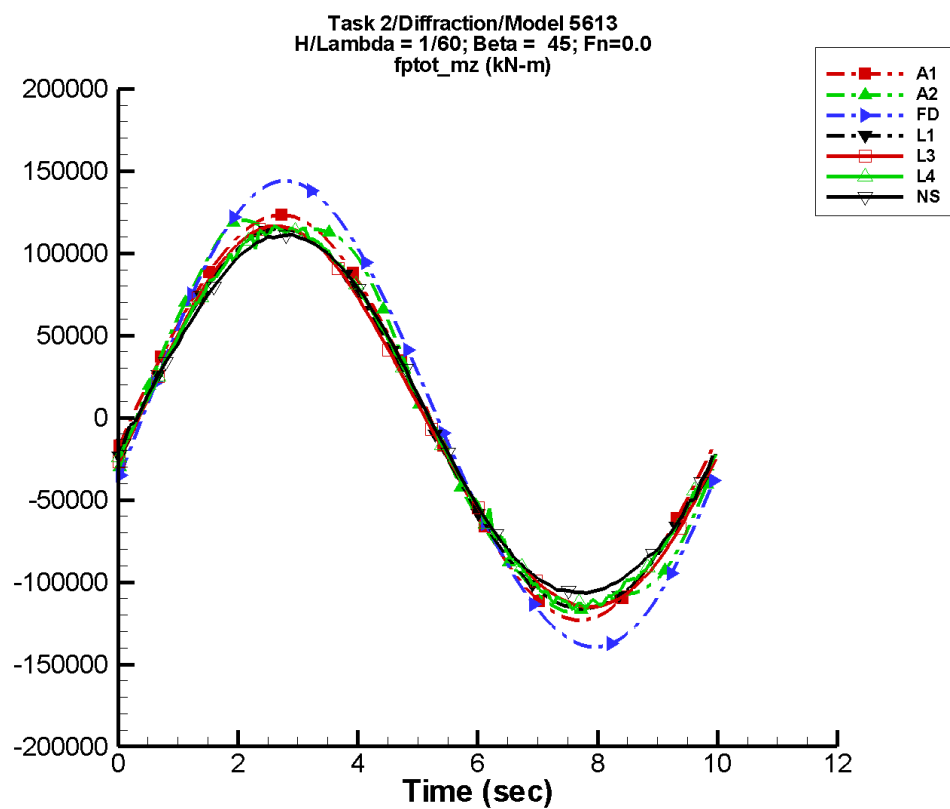
Table G–981. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
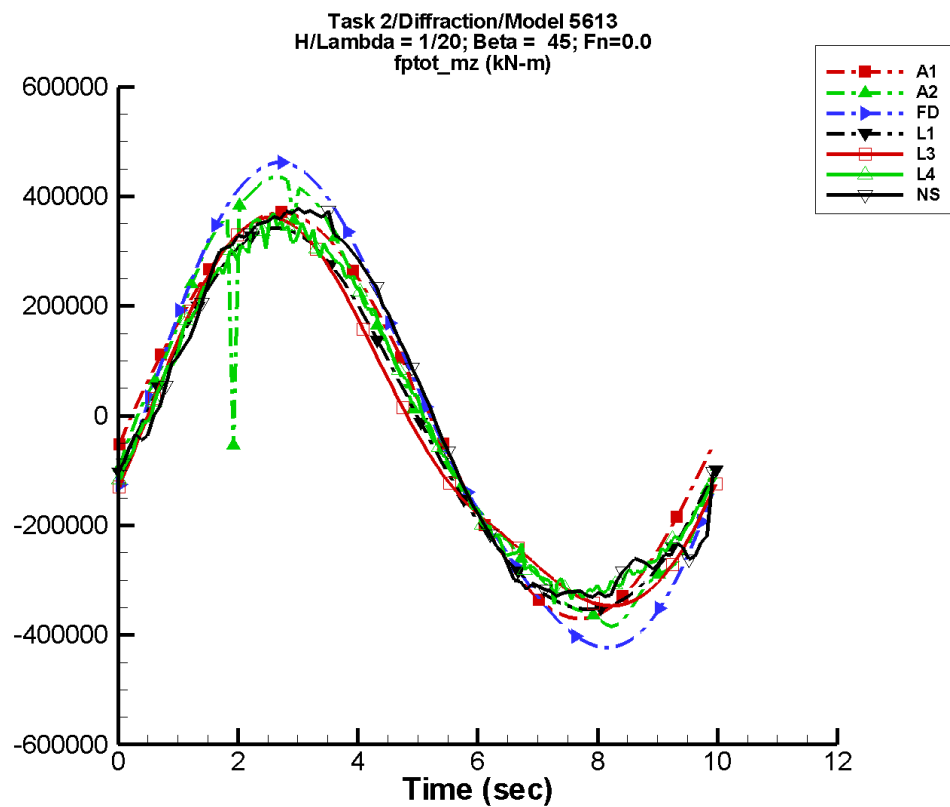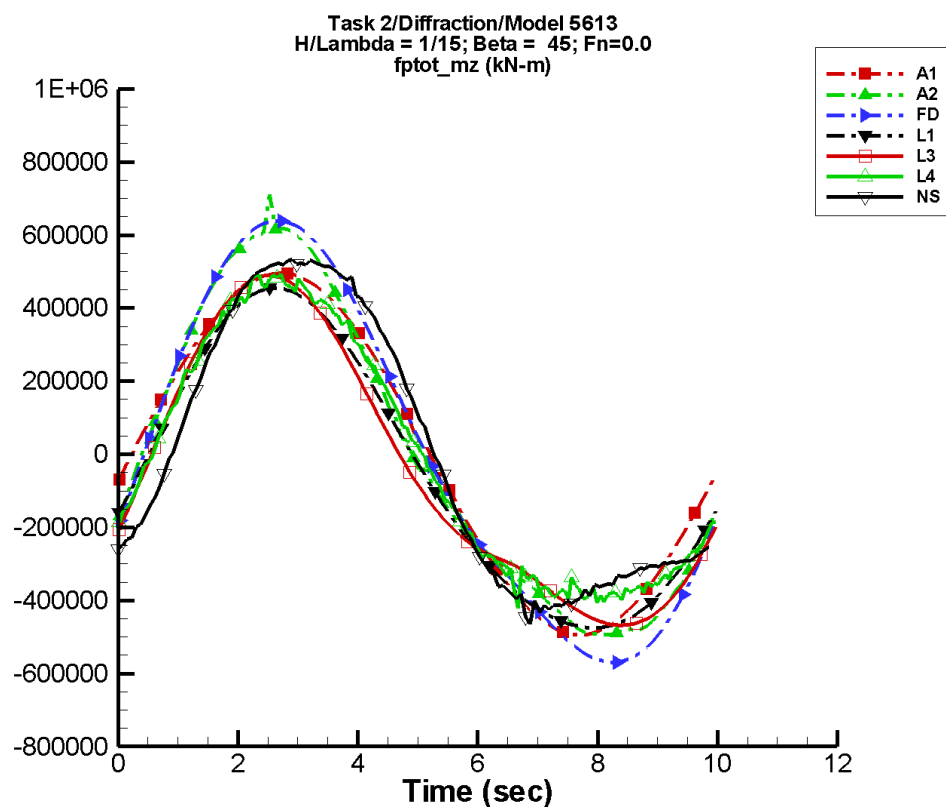
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	1.80E+03	4.45E+04	81	3.37E+04	-25
FD	-1.28E+03	4.58E+04	78	3.70E+04	-9
L1	—	—	—	—	—
L3	-191.	4.58E+04	84	3.64E+04	-12
L4	-191.	4.58E+04	84	3.64E+04	-12
NF	—	—	—	—	—
NS	1.06E+03	7.65E+03	93	1.30E+04	-180

Table G–982. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.05E+05	2.10E+05	-8.45E+04	8.49E+04
FD	-9.14E+04	9.14E+04	-8.72E+04	8.73E+04
L1	—	—	—	—
L3	-8.90E+04	8.91E+04	-8.74E+04	8.75E+04
L4	-8.90E+04	8.91E+04	-8.74E+04	8.75E+04
NF	—	—	—	—
NS	-2.58E+04	3.35E+04	-2.35E+04	3.19E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–492. Time history of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
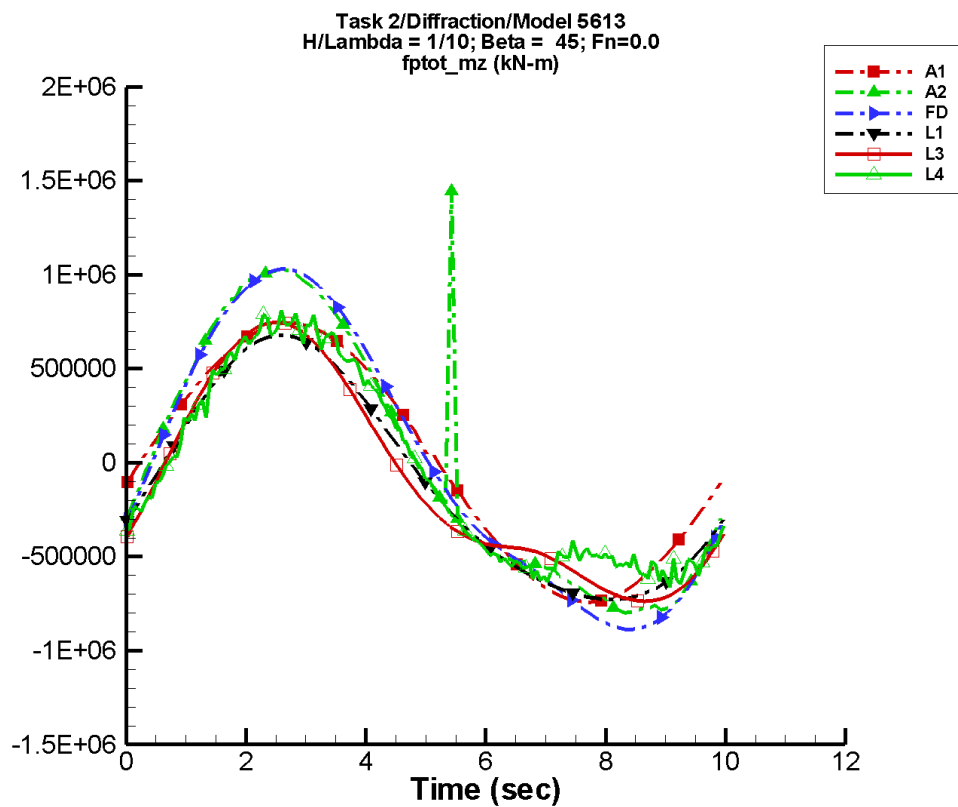
Table G–983. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-1.12E+03	9.60E+04	81	6.69E+04	-20
FD	-1.21E+03	9.69E+04	80	6.74E+04	-12
L1	—	—	—	—	—
L3	1.08E+03	9.37E+04	84	6.12E+04	-10
L4	1.08E+03	9.37E+04	84	6.12E+04	-10
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–984. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-3.13E+05	2.41E+05	-1.89E+05	1.88E+05
FD	-2.06E+05	2.05E+05	-1.89E+05	1.89E+05
L1	—	—	—	—
L3	-1.98E+05	1.98E+05	-1.92E+05	1.92E+05
L4	-1.98E+05	1.98E+05	-1.92E+05	1.92E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.0
fhst_mz (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–493. Time history of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
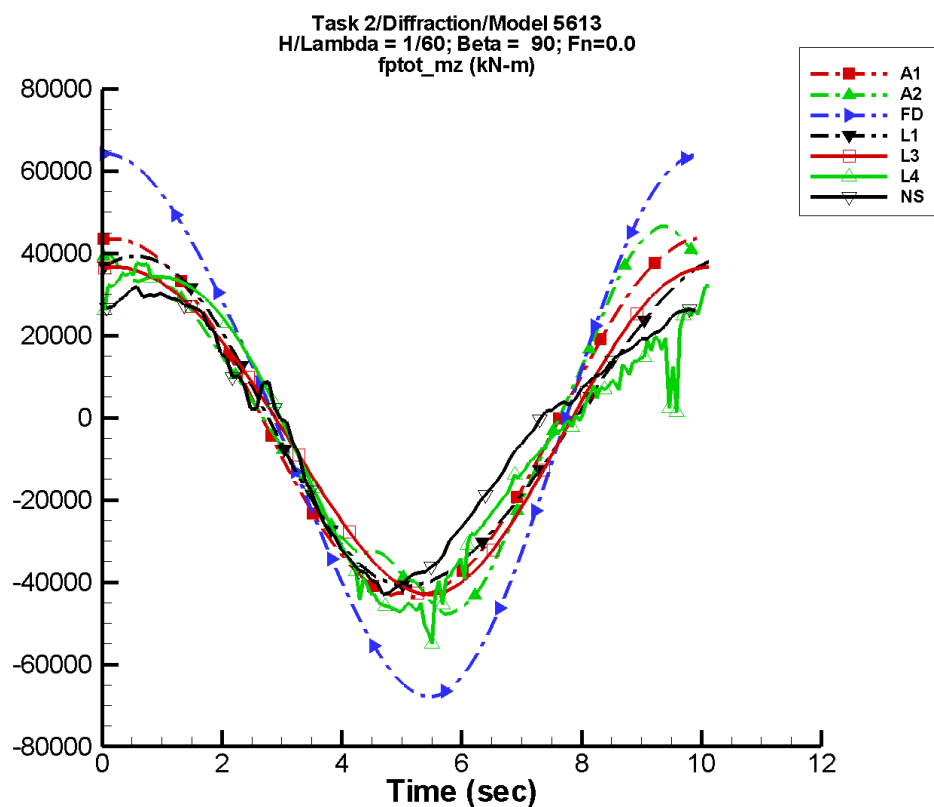
Table G–985. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-348.	1.54E+03	-151	6.65E+03	-134
FD	-12.0	805.	-27	5.36E+03	-135
L1	—	—	—	—	—
L3	27.6	764.	-22	5.38E+03	-128
L4	27.6	764.	-22	5.38E+03	-128
NF	—	—	—	—	—
NS	5.22	239.	0	5.79E+03	-110

Table G–986. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.55E+04	1.68E+04	-1.39E+04	1.44E+04
FD	-6.15E+03	5.40E+03	-6.10E+03	5.26E+03
L1	—	—	—	—
L3	-6.02E+03	5.45E+03	-5.98E+03	5.41E+03
L4	-6.02E+03	5.45E+03	-5.98E+03	5.41E+03
NF	—	—	—	—
NS	-5.86E+03	5.94E+03	-5.76E+03	5.71E+03

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–494. Time history of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–987. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
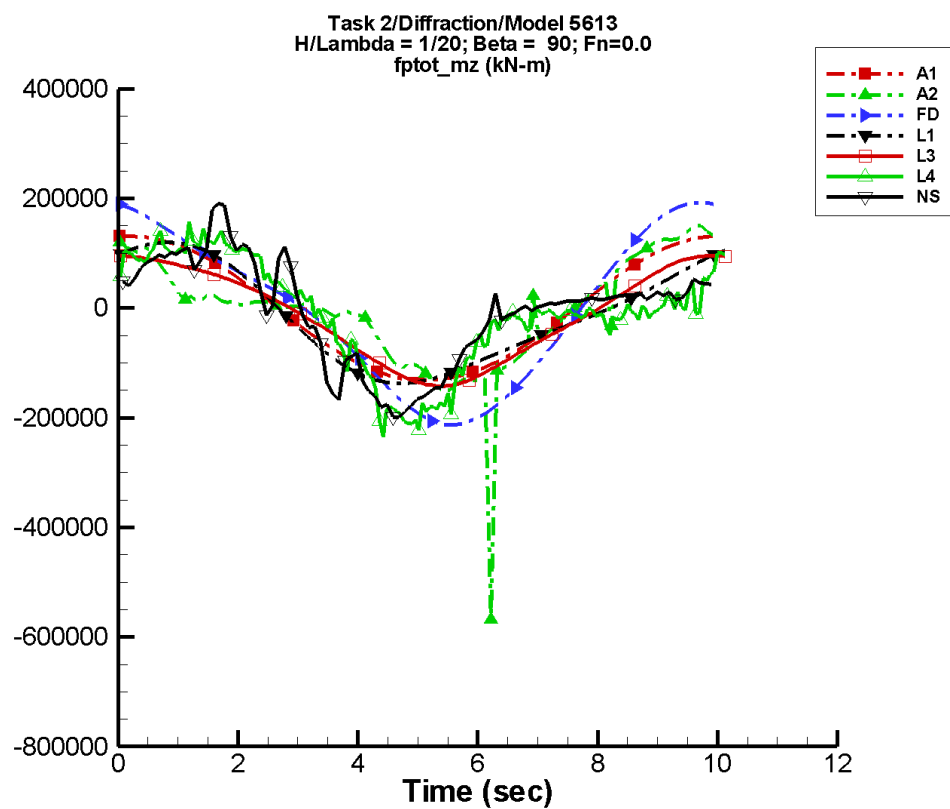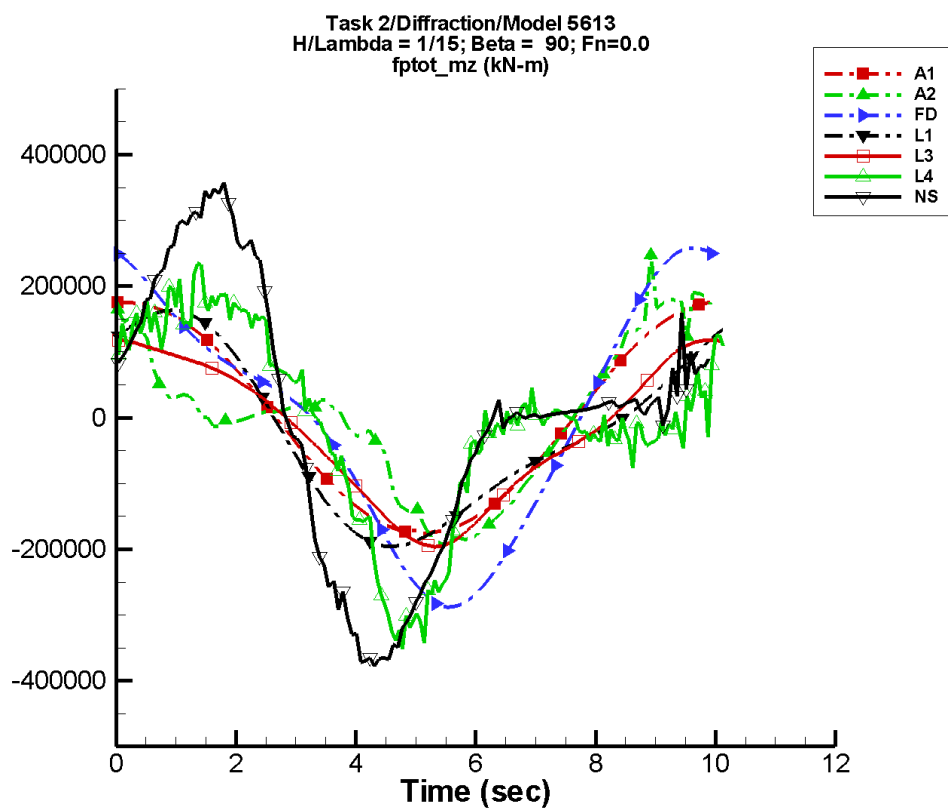
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	2.60E+03	1.94E+04	-31	3.96E+04	-121
FD	470.	1.86E+04	-16	4.34E+04	-124
L1	—	—	—	—	—
L3	185.	1.81E+04	-15	4.46E+04	-115
L4	185.	1.81E+04	-15	4.46E+04	-115
NF	—	—	—	—	—
NS	776.	1.02E+04	6	4.79E+04	-103

Table G–988. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-5.18E+04	1.54E+05	-5.00E+04	5.19E+04
FD	-5.01E+04	5.34E+04	-4.85E+04	5.22E+04
L1	—	—	—	—
L3	-5.04E+04	5.30E+04	-4.98E+04	5.25E+04
L4	-5.04E+04	5.30E+04	-4.98E+04	5.25E+04
NF	—	—	—	—
NS	-5.16E+04	5.32E+04	-4.95E+04	5.13E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.0
fhst_mz (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–495. Time history of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–989. Coefficients of the Fourier fit $a_0+a_1 \sin (\omega t + \Phi_1)+a_2 \sin (2\omega t + \Phi_2)+ \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-2.32E+03	3.82E+04	-10	6.41E+04	-119
FD	1.20E+03	4.11E+04	-12	6.94E+04	-123
L1	—	—	—	—	—
L3	178.	4.09E+04	-12	7.02E+04	-113
L4	178.	4.09E+04	-12	7.02E+04	-113
NF	—	—	—	—	—
NS	654.	1.78E+04	12	8.01E+04	-91

Table G–990. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
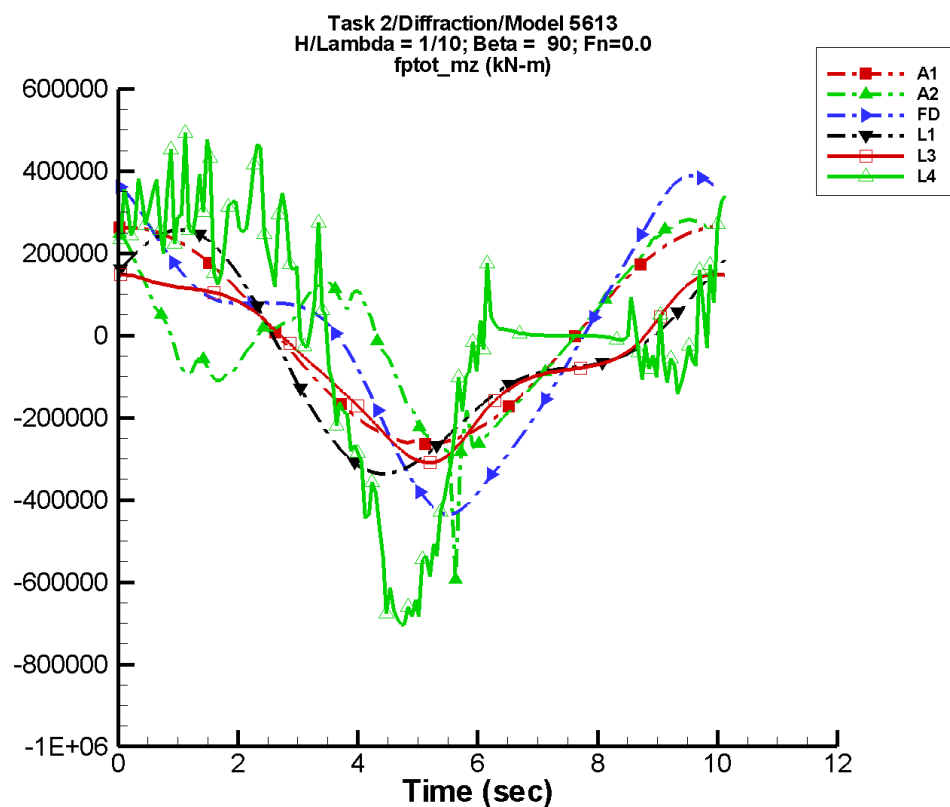
Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.95E+05	9.52E+04	-8.94E+04	7.62E+04
FD	-8.69E+04	9.57E+04	-8.29E+04	9.36E+04
L1	—	—	—	—
L3	-8.53E+04	9.51E+04	-8.40E+04	9.42E+04
L4	-8.53E+04	9.51E+04	-8.40E+04	9.42E+04
NF	—	—	—	—
NS	-8.86E+04	9.59E+04	-8.62E+04	9.40E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–496. Time history of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
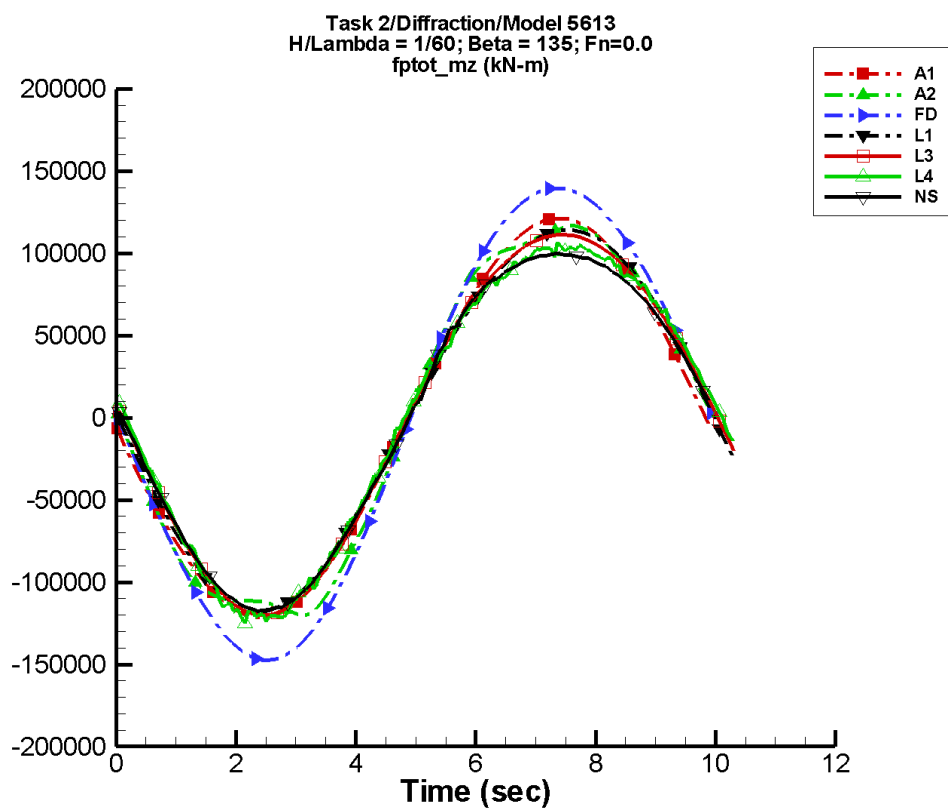
Table G–991. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-2.47E+03	1.31E+05	-11	1.08E+05	-128
FD	1.07E+03	1.25E+05	-11	1.10E+05	-127
L1	—	—	—	—	—
L3	369.	1.23E+05	-9	1.10E+05	-118
L4	369.	1.23E+05	-9	1.10E+05	-118
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–992. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.60E+05	2.23E+05	-1.51E+05	2.05E+05
FD	-1.48E+05	2.06E+05	-1.45E+05	2.04E+05
L1	—	—	—	—
L3	-1.44E+05	2.04E+05	-1.42E+05	2.02E+05
L4	-1.44E+05	2.04E+05	-1.42E+05	2.02E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–497. Time history of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
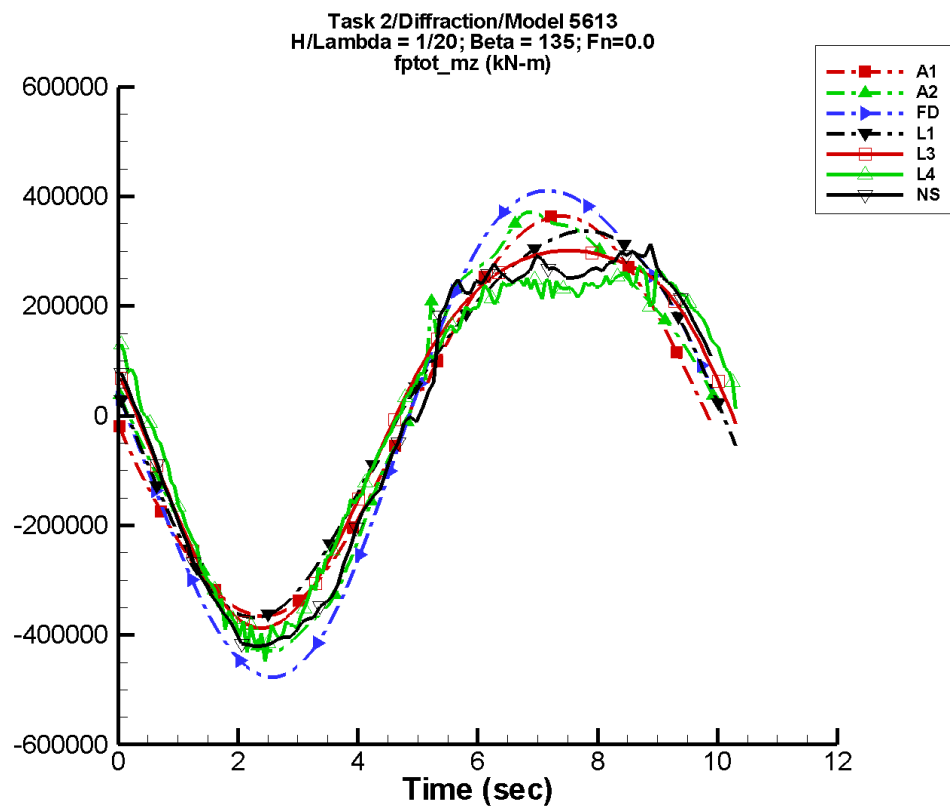
Table G–993. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$ $\cdots$ of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	4.47E-04	7.45E-04	55	1.44E-03	-101
FD	3.59E-04	1.31E-03	125	5.84E-04	59
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	4.41E-03	1.11E-02	-86	2.68E-03	3

Table G–994. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-5.63E-03	8.72E-03	-1.35E-03	5.69E-03
FD	-6.50E-03	4.50E-03	-2.36E-03	2.09E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-6.58E-02	5.91E-02	-1.45E-02	2.05E-02

Figure G–498. Time history of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
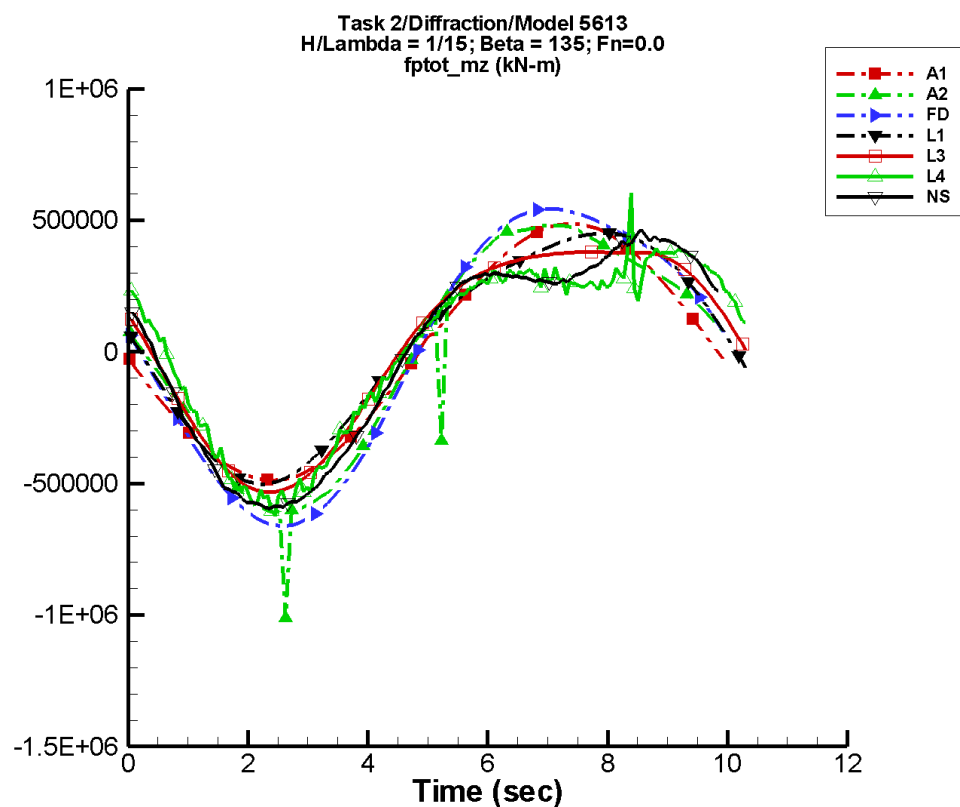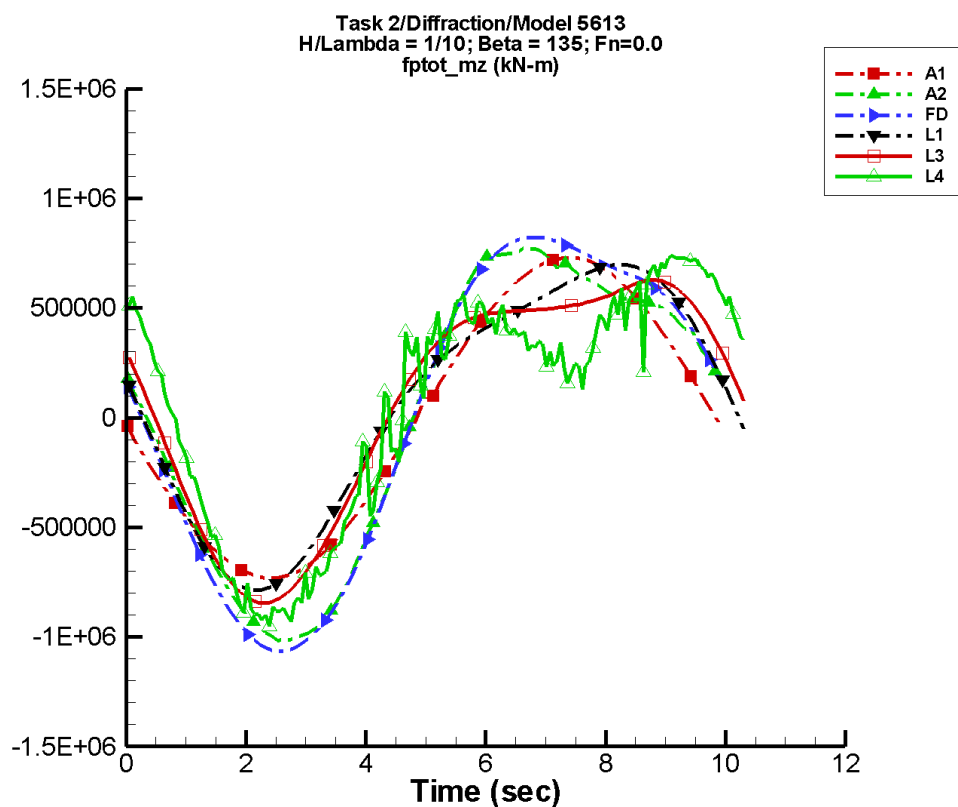
Table G–995. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) +$
$\cdots$ of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$,
$F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of
Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	1.62E+03	8.48E+03	-49	4.49E+03	-102
FD	8.52E-03	2.12E-02	0	1.22E-02	-68
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-4.42E-04	1.17E-02	-31	8.83E-03	86

Table G–996. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/20$,
$\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF
motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-2.45E+05	2.12E+05	-3.32E+04	2.83E+04
FD	-3.45E-02	0.113	-2.38E-02	4.85E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-7.75E-02	0.106	-2.37E-02	2.77E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 180; Fn=0.0
fhst_mz (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–499. Time history of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
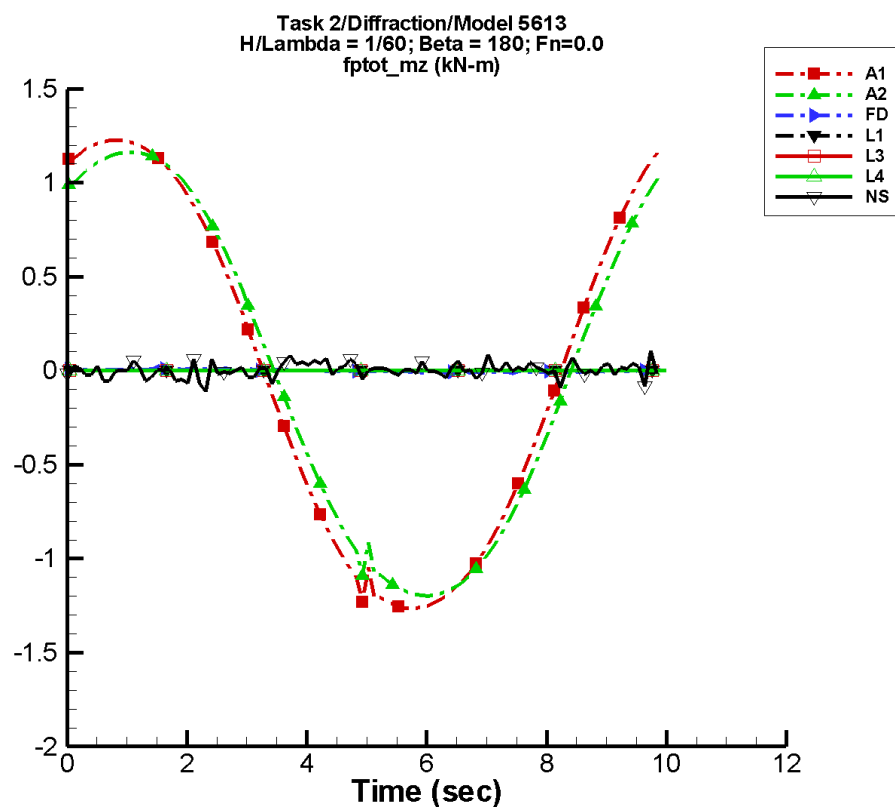
Table G–997. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-2.15E+03	4.26E+03	-130	4.41E+03	-178
FD	-1.16E-03	6.03E-03	138	9.61E-03	69
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.03E-02	5.07E-03	-42	1.15E-02	21

Table G–998. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-3.87E+05	6.22E-02	-5.16E+04	4.41E+03
FD	-2.90E-02	4.35E-02	-2.76E-02	2.60E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-9.09E-02	8.45E-02	-3.49E-02	2.62E-02

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–500. Time history of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

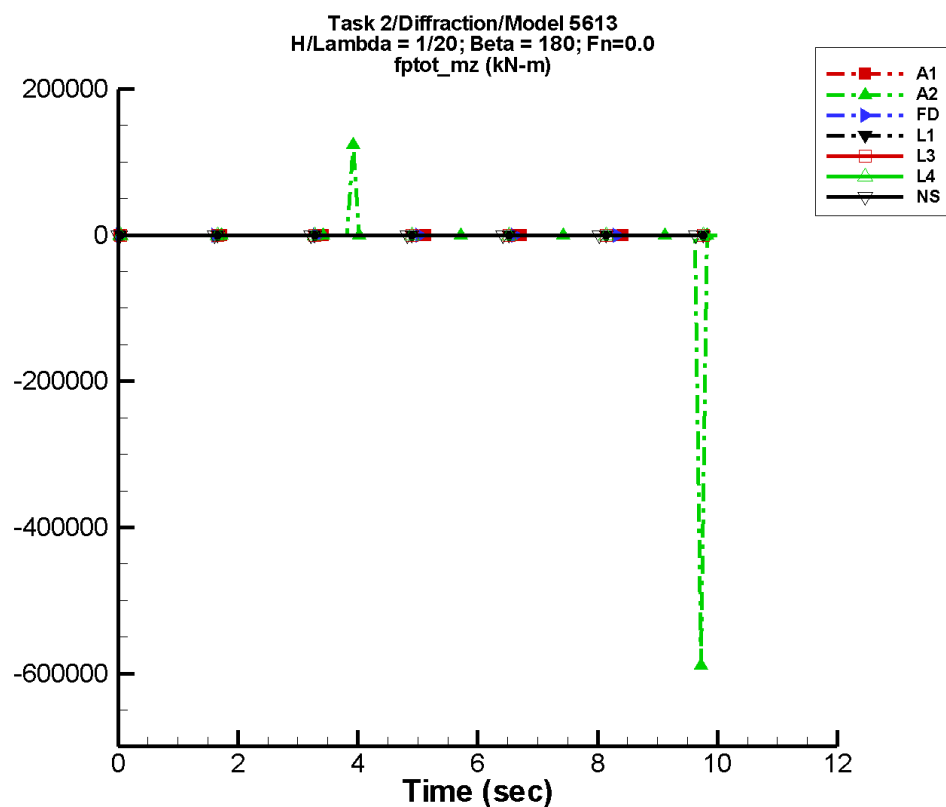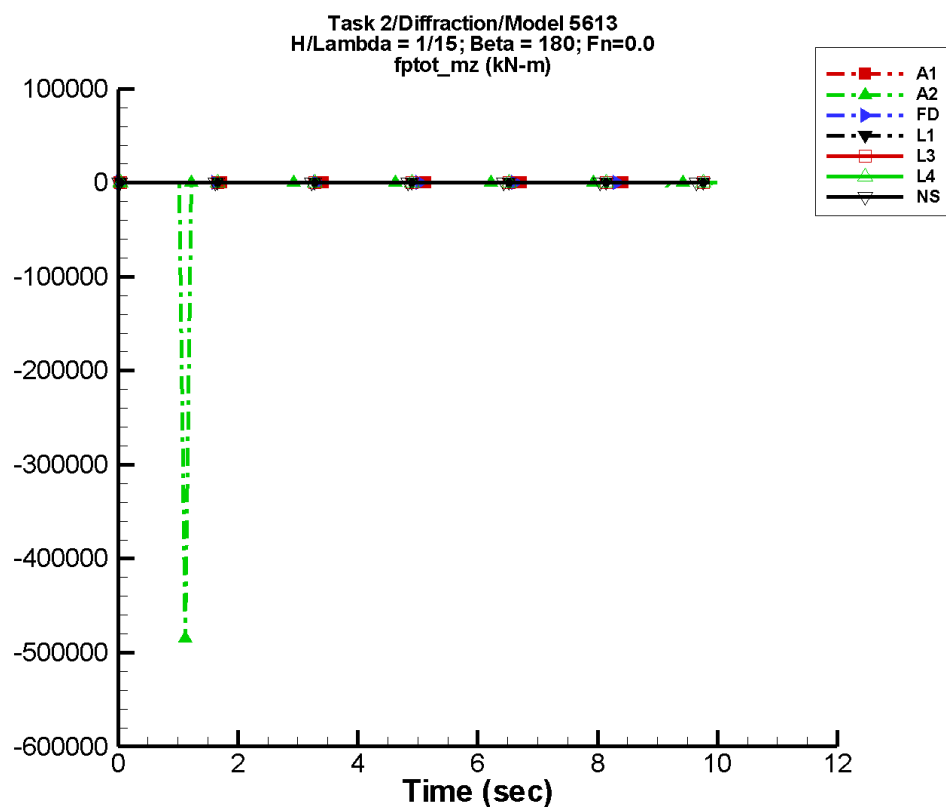Table G–999. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	948.	846.	-10	5.48E+03	31
FD	1.39E-03	4.62E-03	163	4.36E-03	91
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1000. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.78E+05	1.86E+05	-2.46E+04	2.48E+04
FD	-0.118	4.55E-02	-1.57E-02	1.76E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–501. Time history of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
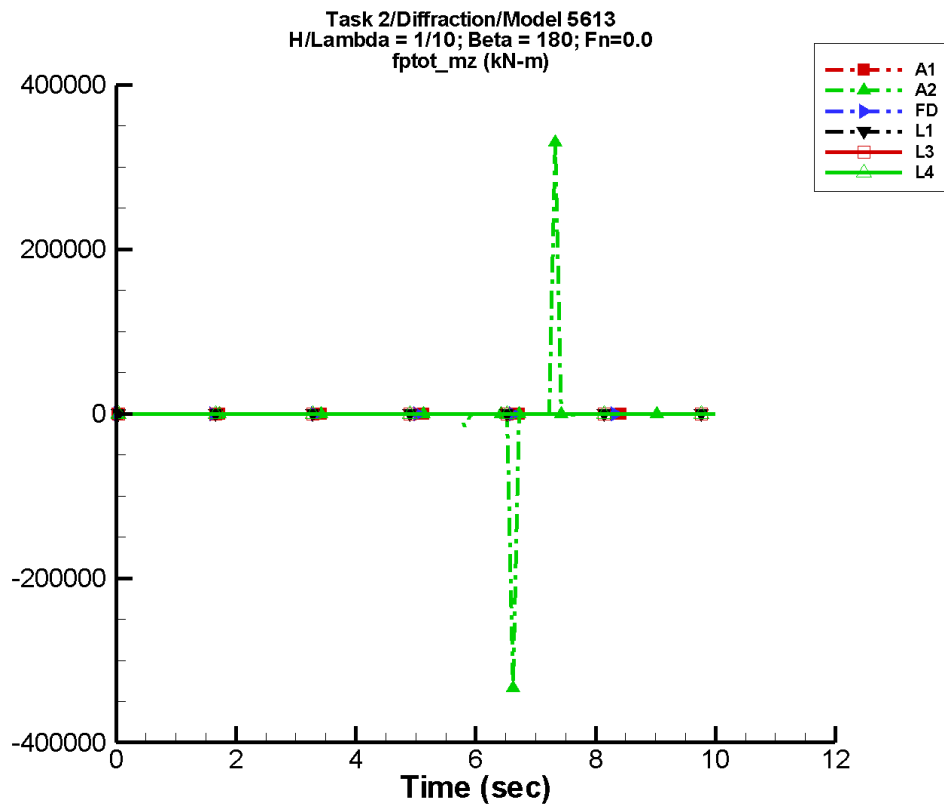
Table G–1001. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	3.78E-04	7.71E-04	-94	1.15E-03	-98
FD	1.97E-04	2.46E-04	-121	2.98E-04	170
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.03E-04	7.09E-03	95	3.92E-03	110

Table G–1002. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered		Filtered	
	Minimum (kN-m)	Maximum (kN-m)	Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-7.97E-03	9.48E-03	-3.00E-03	7.91E-03
FD	-2.50E-03	1.50E-03	-9.18E-04	9.65E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-5.22E-02	6.26E-02	-1.46E-02	2.27E-02

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–502. Time history of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
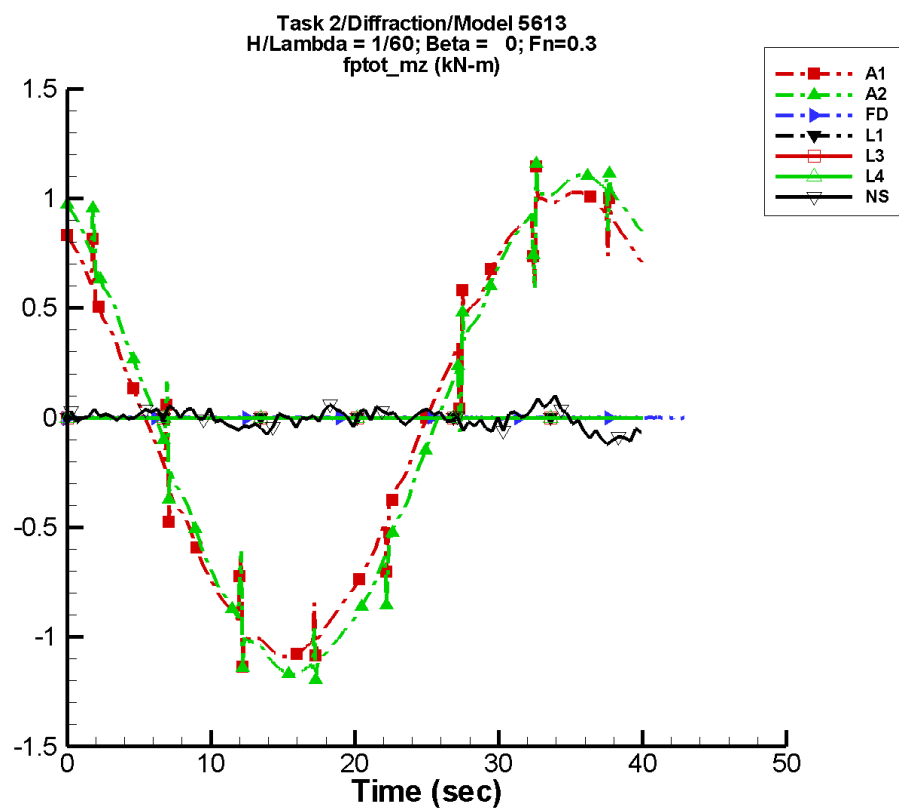
Table G–1003. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	1.24E+03	2.82E+03	35	1.61E+03	-18
FD	7.17E-05	5.11E-04	30	4.62E-04	170
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	3.36E-03	1.27E-02	70	8.21E-03	78

Table G–1004. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

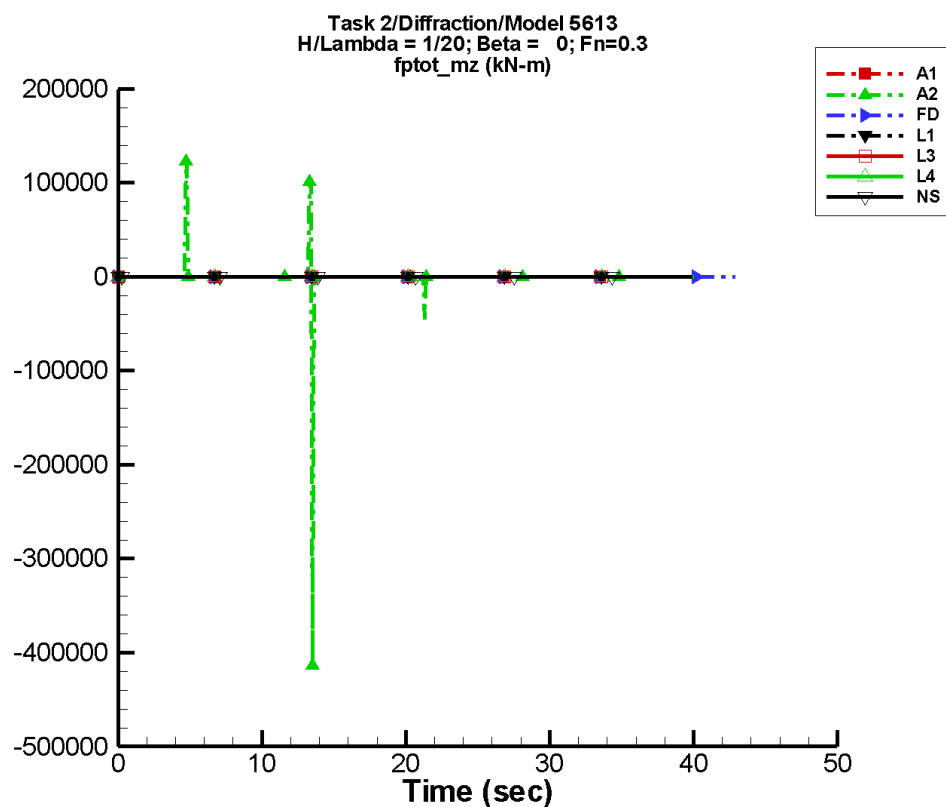| Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.69E+05	2.12E+05	-1.25E+04	5.54E+04
FD	-2.50E-03	3.50E-03	-1.30E-03	1.97E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-8.12E-02	9.05E-02	-1.40E-02	3.97E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 0; Fn=0.3
fhst_mz (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–503. Time history of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
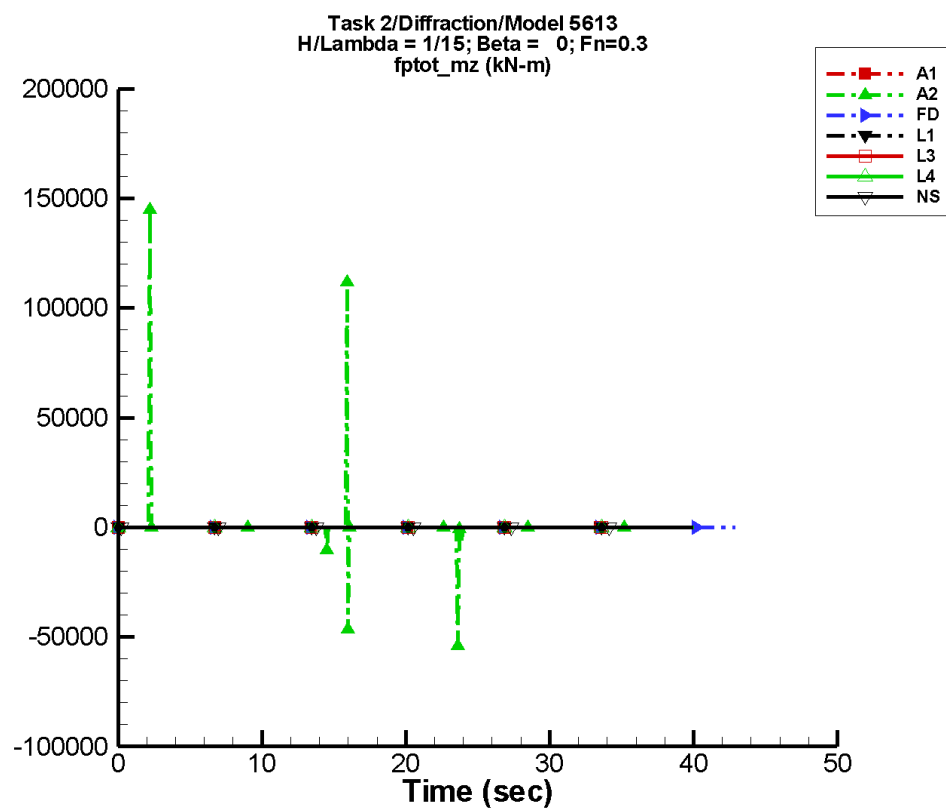
Table G–1005. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	610.	1.75E+03	49	1.38E+03	118
FD	-1.64E-04	8.69E-04	55	5.51E-04	-177
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-9.64E-03	1.52E-02	-26	7.06E-03	-172

Table G–1006. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-9.92E+04	2.12E+05	-1.87E+04	2.83E+04
FD	-4.50E-03	3.50E-03	-2.82E-03	1.87E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.118	8.87E-02	-5.30E-02	1.68E-02

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–504. Time history of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
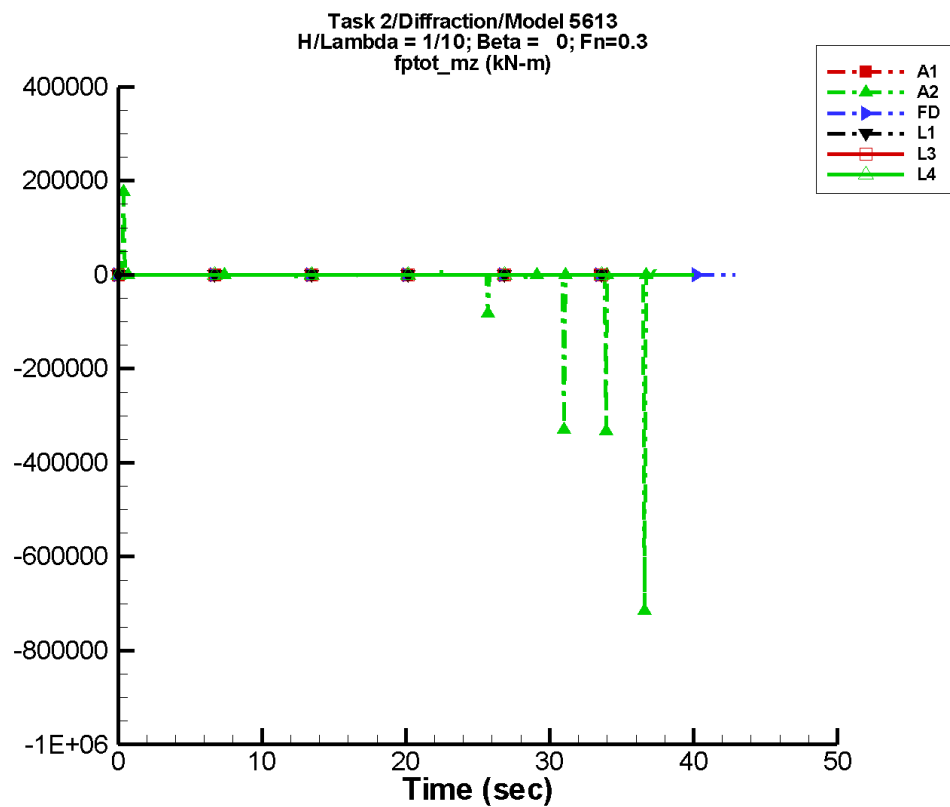
Table G–1007. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	1.69E+03	3.20E+03	127	2.38E+03	175
FD	3.66E-04	1.34E-03	143	3.10E-04	-106
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1008. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-9.62E+04	2.51E+05	-1.28E+04	3.37E+04
FD	-4.50E-03	5.50E-03	-2.01E-03	3.35E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–505. Time history of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
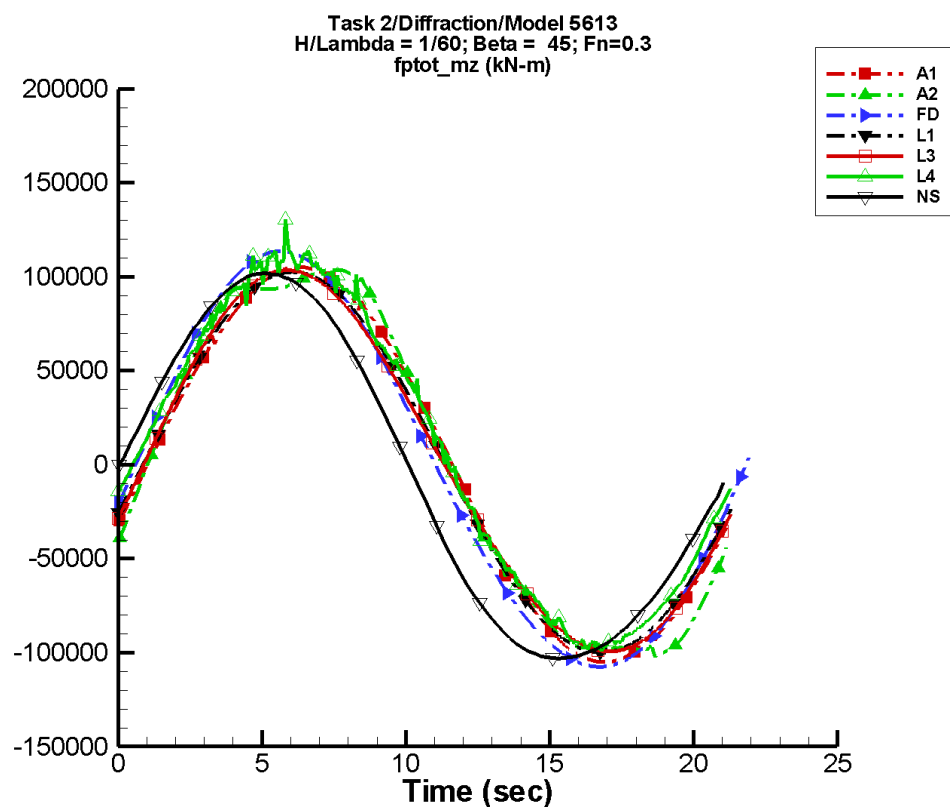
Table G–1009. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	350.	1.54E+03	17	5.67E+03	105
FD	-20.7	739.	-152	5.33E+03	130
L1	—	—	—	—	—
L3	12.6	741.	-152	5.30E+03	123
L4	12.6	741.	-152	5.30E+03	123
NF	—	—	—	—	—
NS	6.67	162.	-166	2.90E+03	109

Table G–1010. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

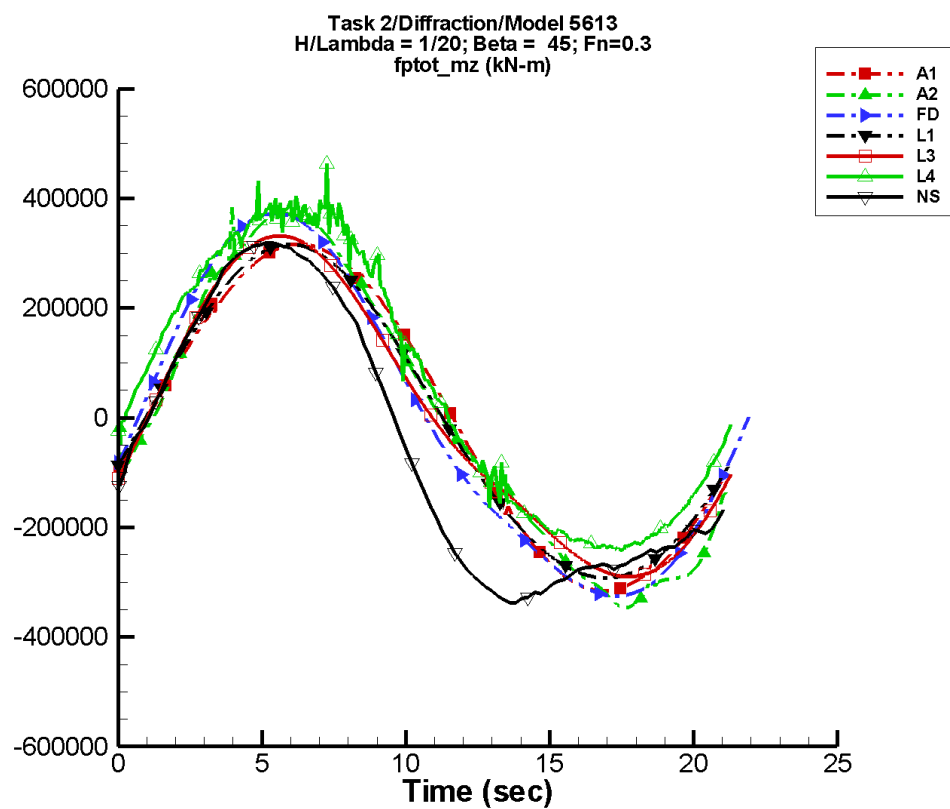| Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-1.69E+04	1.55E+04	-1.62E+04	1.52E+04
FD	-5.40E+03	6.16E+03	-5.37E+03	6.08E+03
L1	—	—	—	—
L3	-5.45E+03	6.02E+03	-5.44E+03	6.00E+03
L4	-5.45E+03	6.02E+03	-5.44E+03	6.00E+03
NF	—	—	—	—
NS	-2.97E+03	2.99E+03	-2.90E+03	2.86E+03

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–506. Time history of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
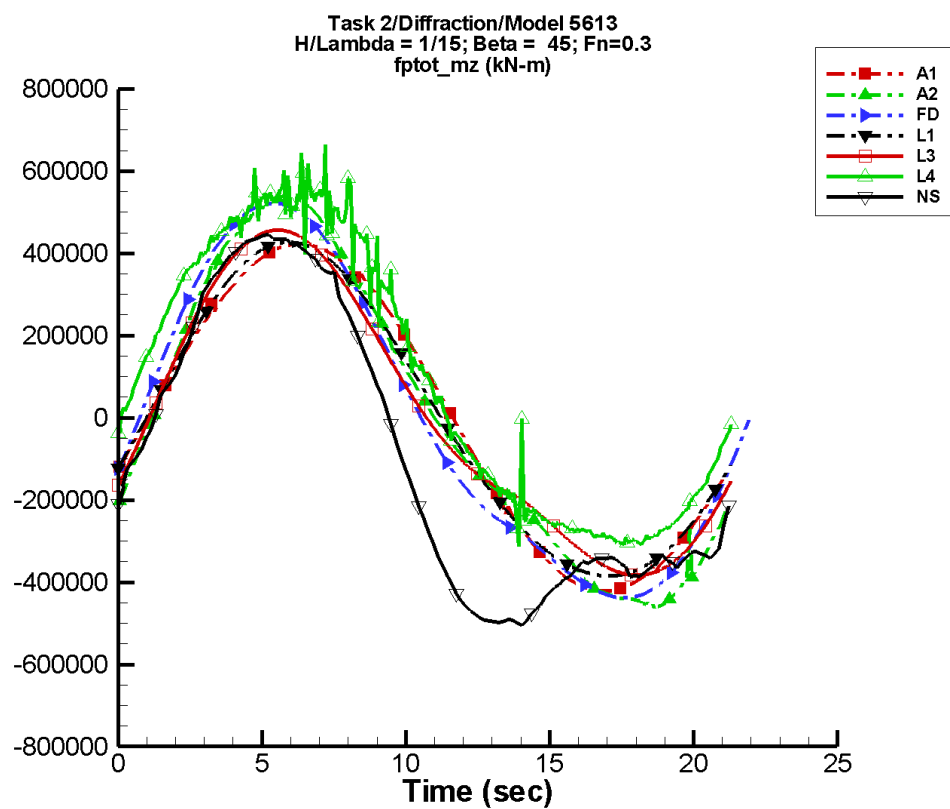
Table G–1011. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	2.41E+03	1.59E+04	-171	4.34E+04	105
FD	-173.	1.85E+04	-160	4.30E+04	118
L1	—	—	—	—	—
L3	-2.95	1.78E+04	-163	4.32E+04	111
L4	-2.95	1.78E+04	-163	4.32E+04	111
NF	—	—	—	—	—
NS	176.	3.67E+03	-169	2.90E+04	90

Table G–1012. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-5.60E+04	2.31E+05	-5.58E+04	1.45E+05
FD	-5.35E+04	5.04E+04	-5.30E+04	4.99E+04
L1	—	—	—	—
L3	-5.31E+04	5.05E+04	-5.28E+04	5.03E+04
L4	-5.31E+04	5.05E+04	-5.28E+04	5.03E+04
NF	—	—	—	—
NS	-3.02E+04	3.04E+04	-3.03E+04	2.95E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–507. Time history of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
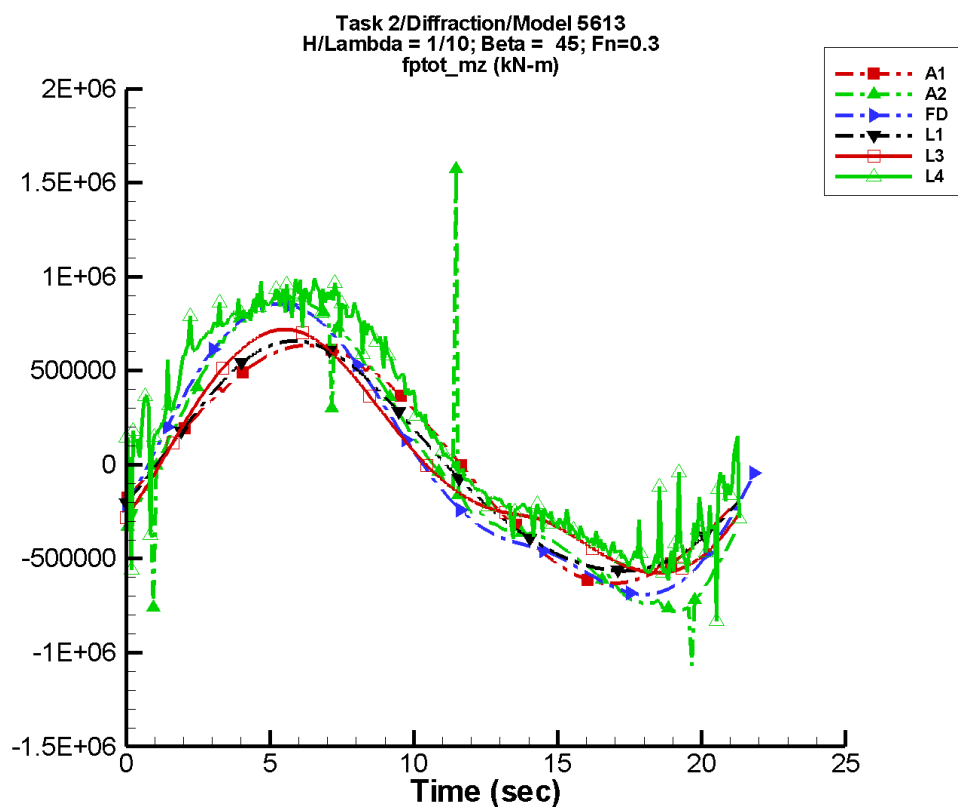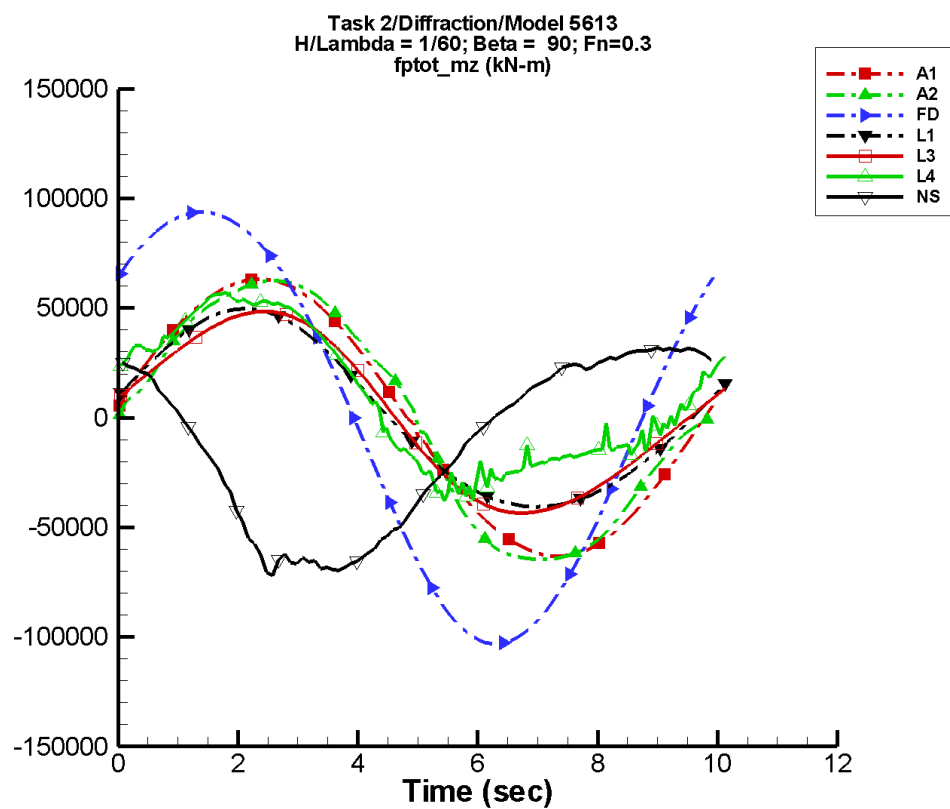
Table G–1013. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	385.	4.01E+04	-172	6.46E+04	108
FD	-429.	4.16E+04	-165	6.72E+04	117
L1	—	—	—	—	—
L3	-195.	4.02E+04	-167	6.71E+04	110
L4	-195.	4.02E+04	-167	6.71E+04	110
NF	—	—	—	—	—
NS	425.	1.04E+04	-171	5.00E+04	89

Table G–1014. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-9.64E+04	2.85E+05	-9.34E+04	1.11E+05
FD	-9.58E+04	8.67E+04	-9.51E+04	8.58E+04
L1	—	—	—	—
L3	-9.51E+04	8.53E+04	-9.48E+04	8.52E+04
L4	-9.51E+04	8.53E+04	-9.48E+04	8.52E+04
NF	—	—	—	—
NS	-5.38E+04	5.27E+04	-5.41E+04	5.16E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–508. Time history of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1015. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	2.67E+03	1.30E+05	-178	1.07E+05	113
FD	-313.	1.25E+05	-169	1.08E+05	122
L1	—	—	—	—	—
L3	407.	1.21E+05	-173	1.07E+05	114
L4	407.	1.21E+05	-173	1.07E+05	114
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1016. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
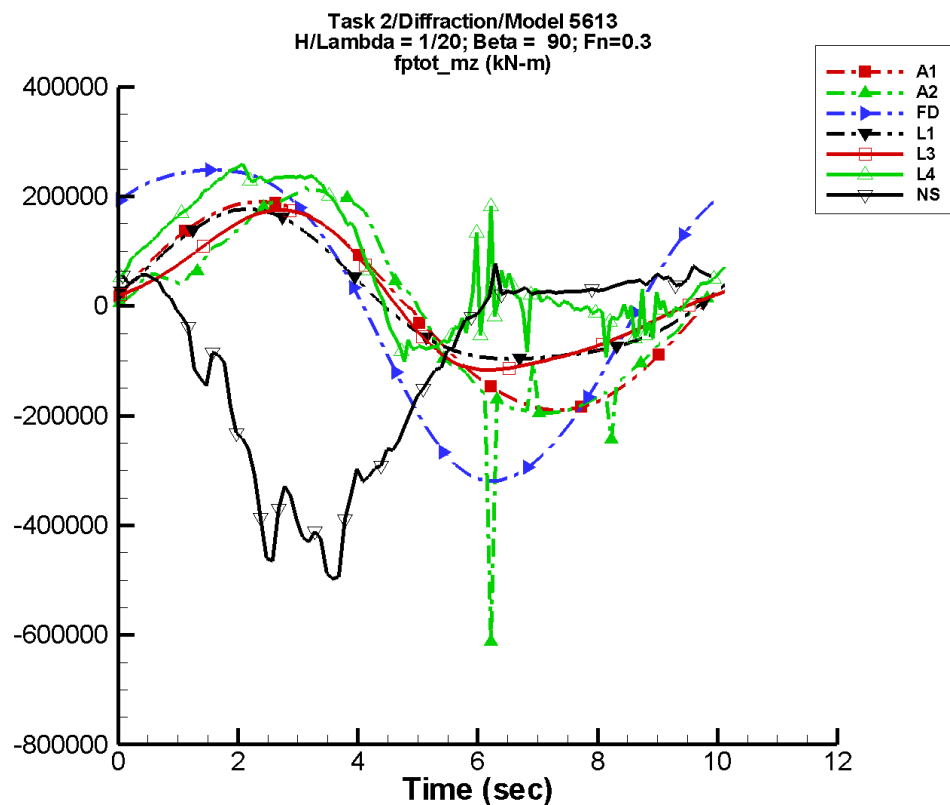
Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-3.90E+05	3.23E+05	-2.12E+05	1.66E+05
FD	-2.06E+05	1.48E+05	-2.05E+05	1.47E+05
L1	—	—	—	—
L3	-2.04E+05	1.44E+05	-2.03E+05	1.43E+05
L4	-2.04E+05	1.44E+05	-2.03E+05	1.43E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.3
fhst_mz (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–509. Time history of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
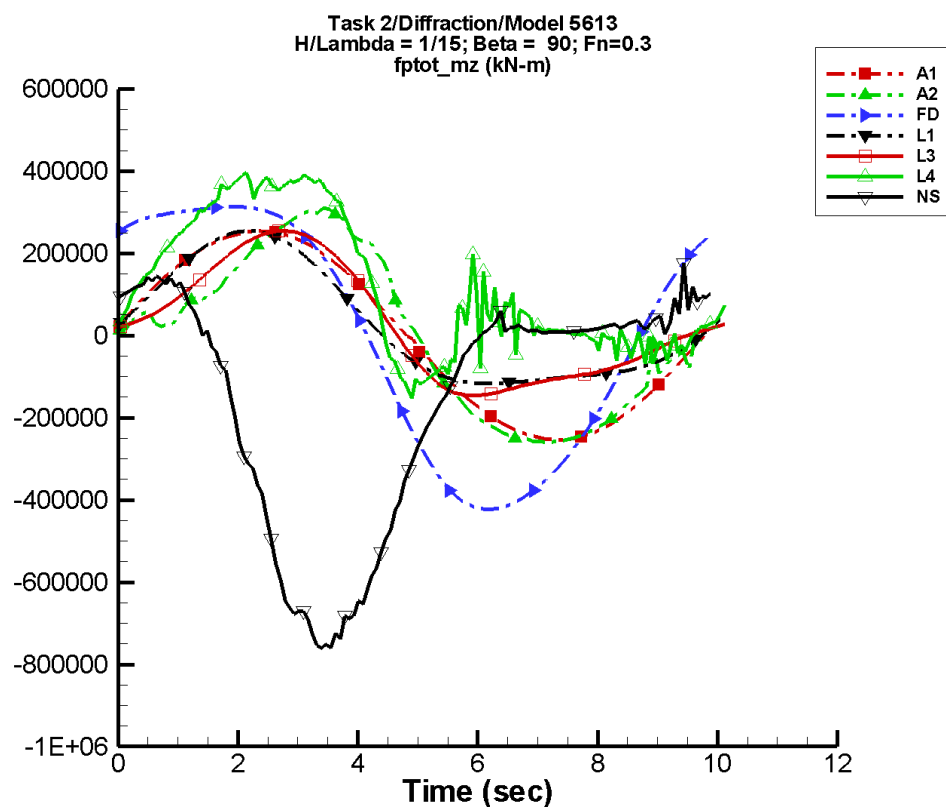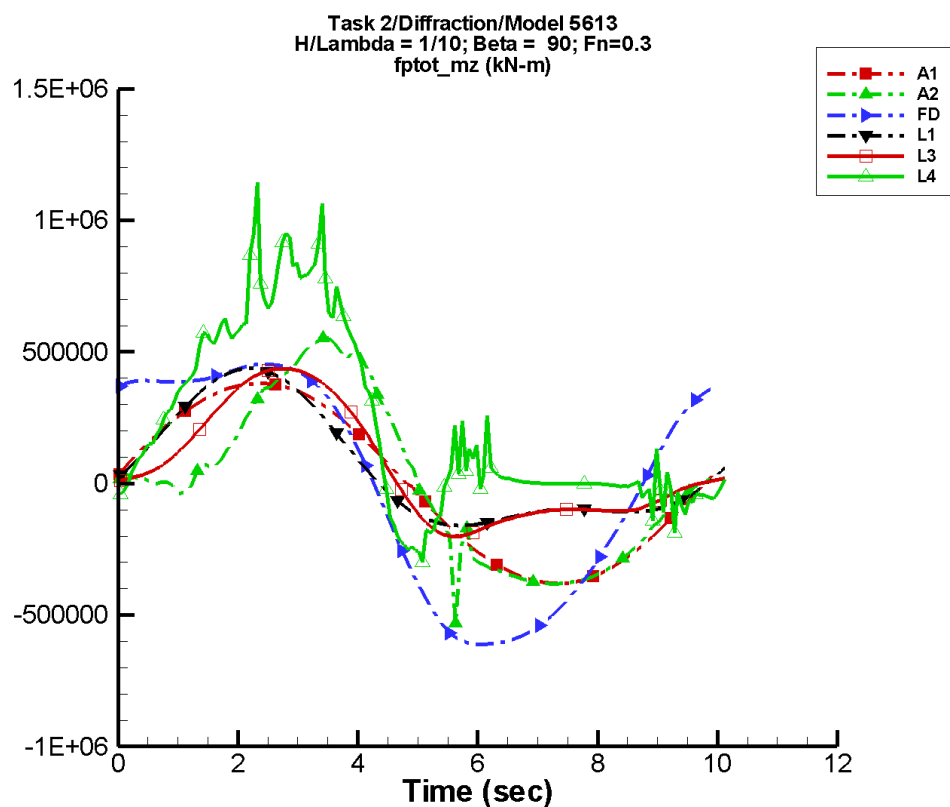
Table G–1017. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	4.23	2.77E+03	75	2.36E+03	-29
FD	-26.3	931.	77	4.53E+03	-14
L1	—	—	—	—	—
L3	-5.93E-02	982.	84	4.45E+03	-9
L4	-5.93E-02	982.	84	4.45E+03	-9
NF	—	—	—	—	—
NS	1.20	33.1	89	1.41E+03	-8

Table G–1018. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-7.59E+03	7.65E+03	-6.94E+03	6.94E+03
FD	-5.77E+03	5.77E+03	-5.47E+03	5.48E+03
L1	—	—	—	—
L3	-5.58E+03	5.58E+03	-5.48E+03	5.48E+03
L4	-5.58E+03	5.58E+03	-5.48E+03	5.48E+03
NF	—	—	—	—
NS	-1.45E+03	1.42E+03	-1.39E+03	1.37E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.3
fhst_mz (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–510. Time history of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1019. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-2.34E+03	2.10E+04	70	2.51E+04	-21
FD	-631.	2.18E+04	78	2.50E+04	-11
L1	—	—	—	—	—
L3	-78.9	2.19E+04	84	2.50E+04	-11
L4	-78.9	2.19E+04	84	2.50E+04	-11
NF	—	—	—	—	—
NS	831.	7.13E+03	90	5.68E+03	-16

Table G–1020. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
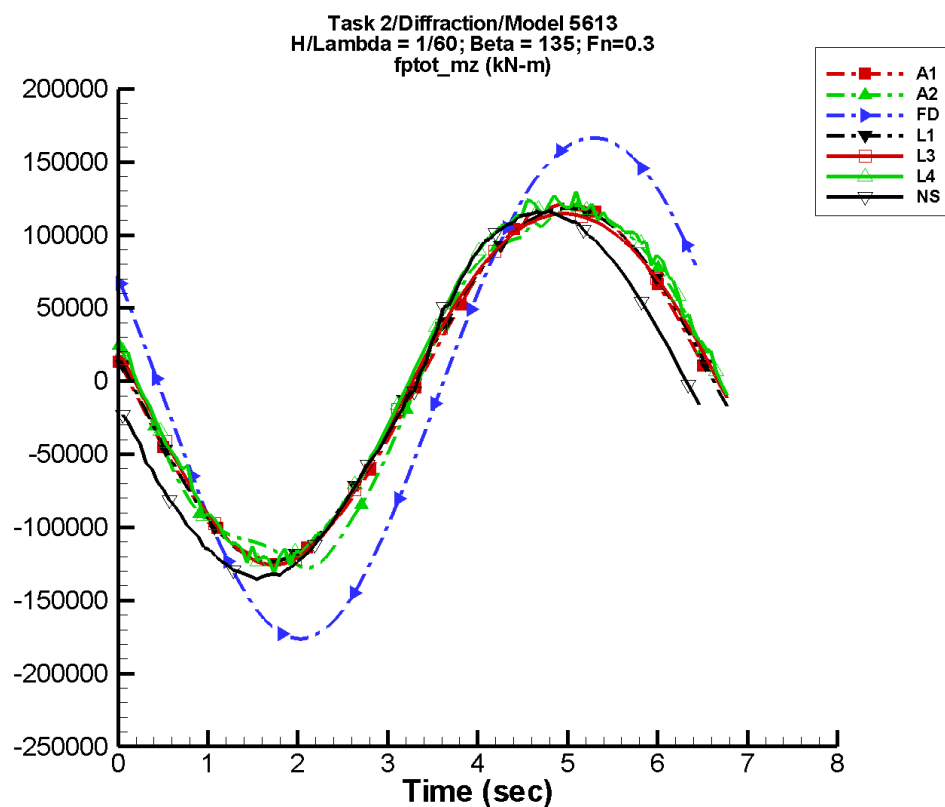
Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-2.64E+05	1.86E+05	-4.51E+04	4.47E+04
FD	-5.14E+04	5.14E+04	-4.89E+04	4.90E+04
L1	—	—	—	—
L3	-5.05E+04	5.05E+04	-4.95E+04	4.95E+04
L4	-5.05E+04	5.05E+04	-4.95E+04	4.95E+04
NF	—	—	—	—
NS	-1.52E+04	1.48E+04	-1.45E+04	1.42E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.3
fhst_mz (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–511. Time history of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1021. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
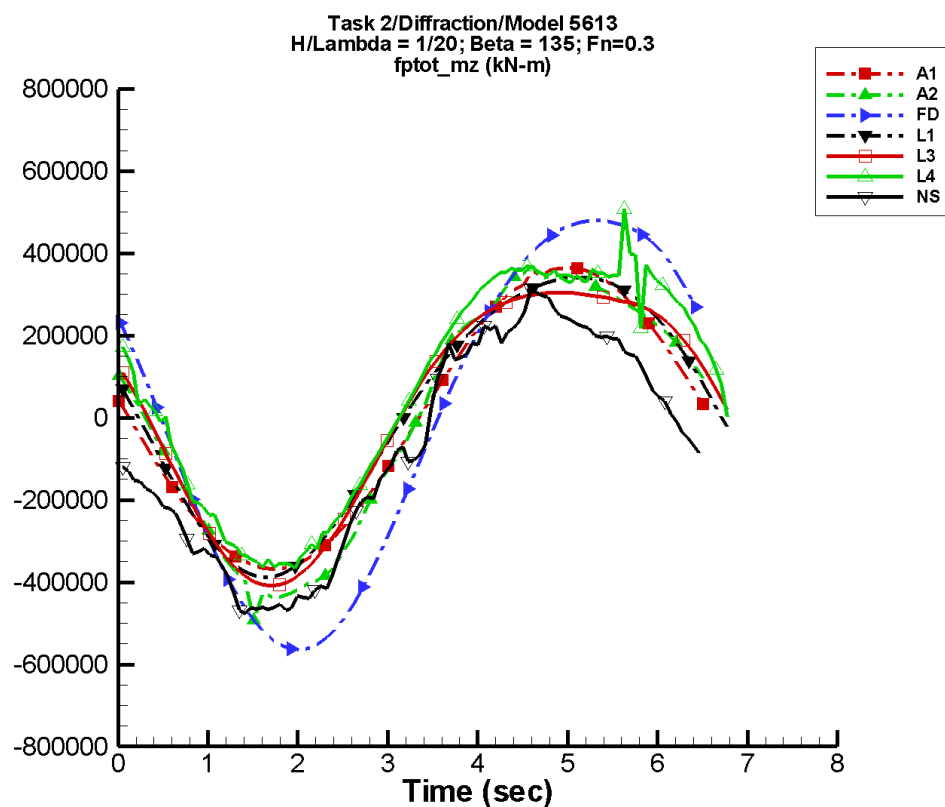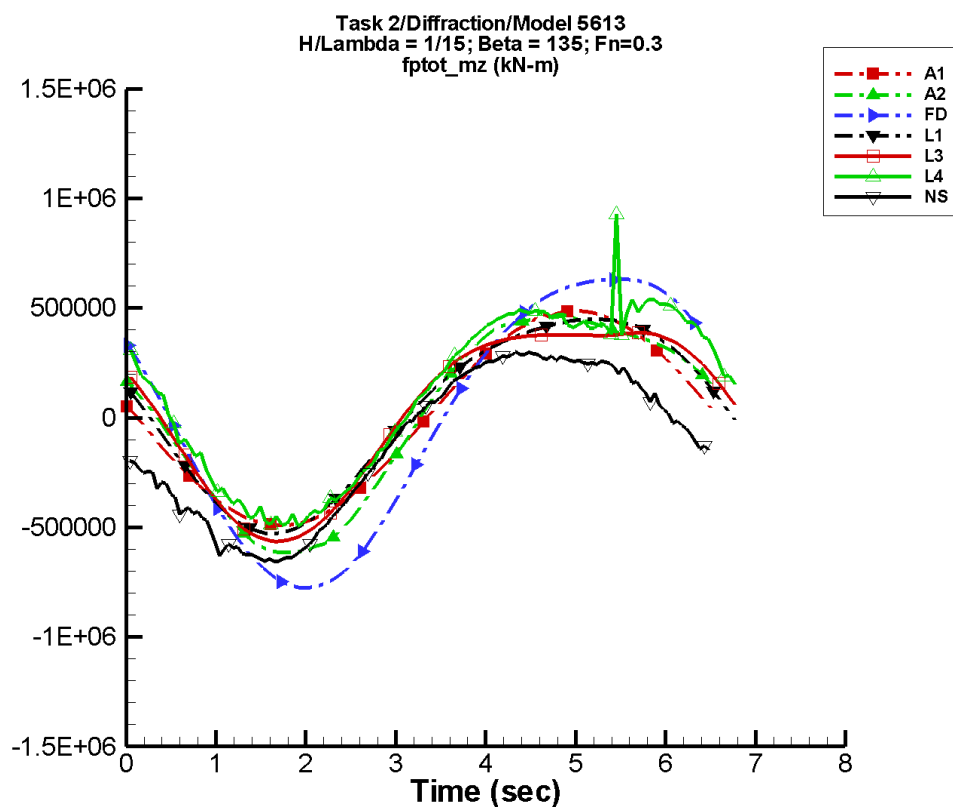
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	1.36E+03	4.40E+04	80	3.44E+04	-24
FD	-1.28E+03	4.58E+04	78	3.70E+04	-9
L1	—	—	—	—	—
L3	-191.	4.58E+04	84	3.64E+04	-12
L4	-191.	4.58E+04	84	3.64E+04	-12
NF	—	—	—	—	—
NS	1.06E+03	7.65E+03	93	1.30E+04	-180

Table G–1022. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.05E+05	2.10E+05	-8.45E+04	8.49E+04
FD	-9.14E+04	9.14E+04	-8.72E+04	8.73E+04
L1	—	—	—	—
L3	-8.90E+04	8.91E+04	-8.74E+04	8.75E+04
L4	-8.90E+04	8.91E+04	-8.74E+04	8.75E+04
NF	—	—	—	—
NS	-2.58E+04	3.35E+04	-2.35E+04	3.19E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–512. Time history of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
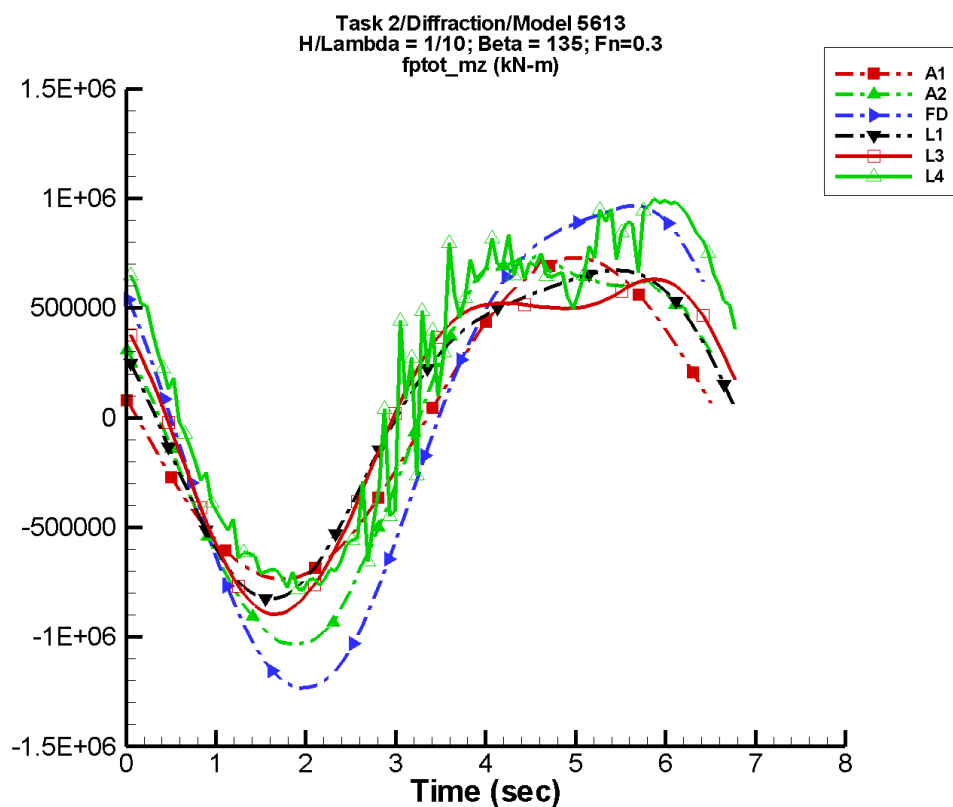
Table G–1023. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-1.12E+03	9.60E+04	81	6.69E+04	-20
FD	-1.21E+03	9.69E+04	80	6.74E+04	-12
L1	—	—	—	—	—
L3	1.08E+03	9.37E+04	84	6.12E+04	-10
L4	1.08E+03	9.37E+04	84	6.12E+04	-10
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1024. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-3.13E+05	2.41E+05	-1.89E+05	1.88E+05
FD	-2.06E+05	2.05E+05	-1.89E+05	1.89E+05
L1	—	—	—	—
L3	-1.98E+05	1.98E+05	-1.92E+05	1.92E+05
L4	-1.98E+05	1.98E+05	-1.92E+05	1.92E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.3
fhst_mz (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–513. Time history of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
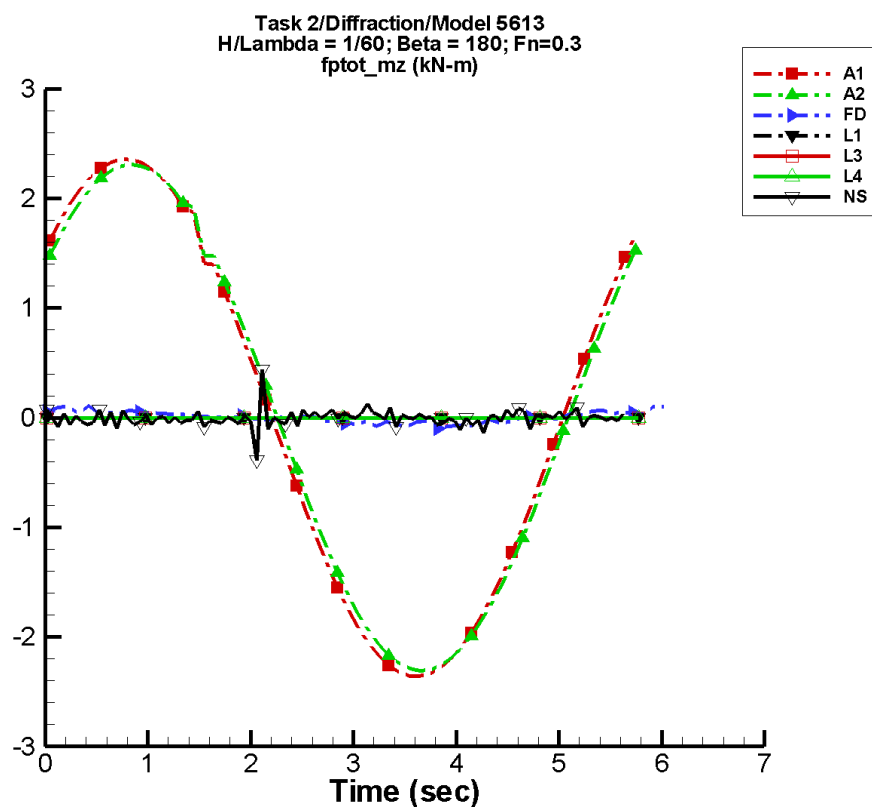
Table G–1025. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	125.	948.	-127	7.45E+03	-133
FD	30.7	826.	-18	5.48E+03	-116
L1	—	—	—	—	—
L3	-15.8	756.	-23	5.33E+03	-126
L4	-15.8	756.	-23	5.33E+03	-126
NF	—	—	—	—	—
NS	6.30	264.	-1	6.05E+03	-110

Table G–1026. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-1.55E+04	1.68E+04	-1.21E+04	1.52E+04
FD	-6.16E+03	5.40E+03	-6.04E+03	5.06E+03
L1	—	—	—	—
L3	-6.01E+03	5.45E+03	-6.01E+03	5.35E+03
L4	-6.01E+03	5.45E+03	-6.01E+03	5.35E+03
NF	—	—	—	—
NS	-6.13E+03	6.21E+03	-6.05E+03	5.98E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 135; Fn=0.3
fhst_mz (kN-m)

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–514. Time history of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
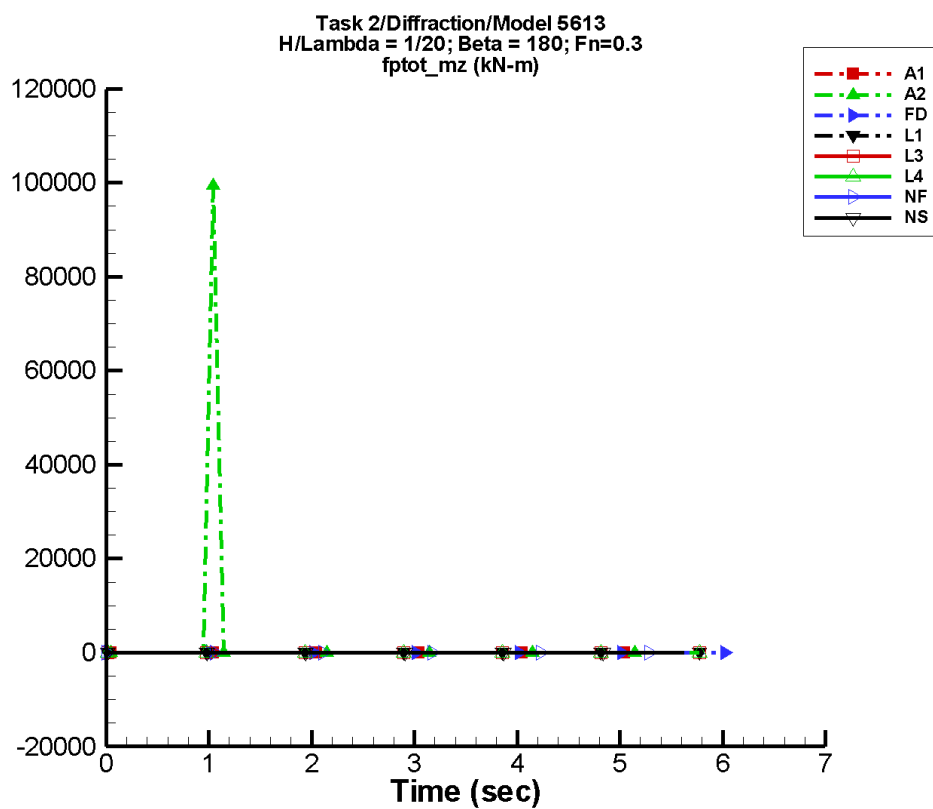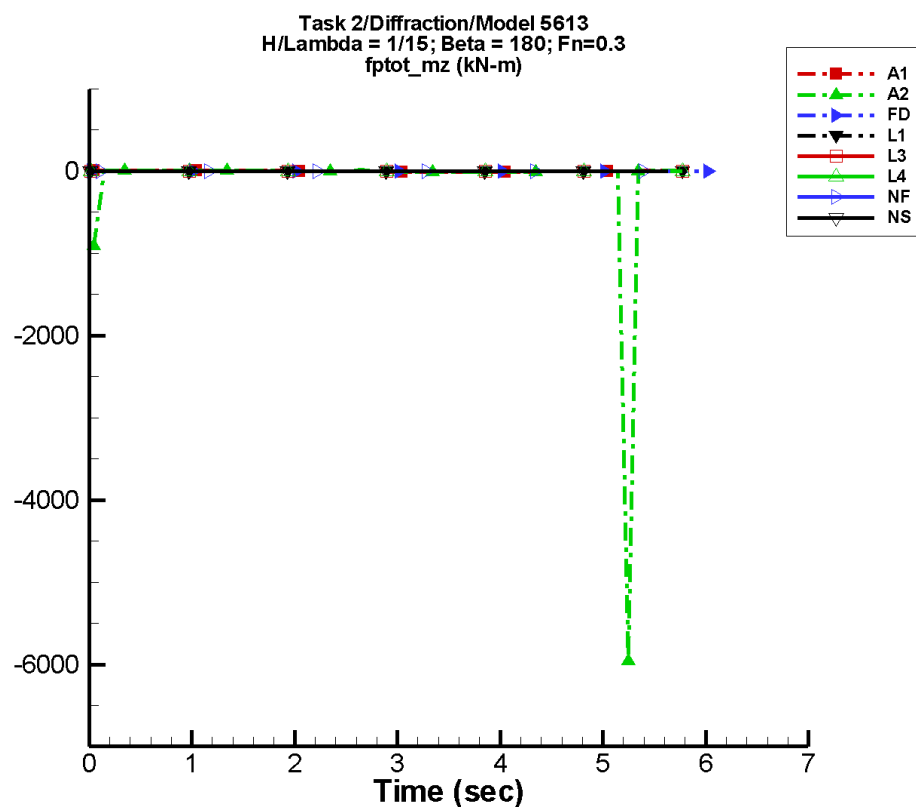
Table G–1027. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-778.	1.60E+04	-21	4.10E+04	-124
FD	595.	1.93E+04	-7	4.41E+04	-103
L1	—	—	—	—	—
L3	101.	1.77E+04	-13	4.30E+04	-113
L4	101.	1.77E+04	-13	4.30E+04	-113
NF	—	—	—	—	—
NS	796.	1.10E+04	6	4.96E+04	-102

Table G–1028. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-5.20E+04	5.53E+04	-4.94E+04	4.57E+04
FD	-5.03E+04	5.34E+04	-4.69E+04	5.08E+04
L1	—	—	—	—
L3	-5.04E+04	5.30E+04	-4.89E+04	5.20E+04
L4	-5.04E+04	5.30E+04	-4.89E+04	5.20E+04
NF	—	—	—	—
NS	-5.38E+04	5.55E+04	-5.17E+04	5.36E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1 and NFA.

Figure G–515. Time history of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
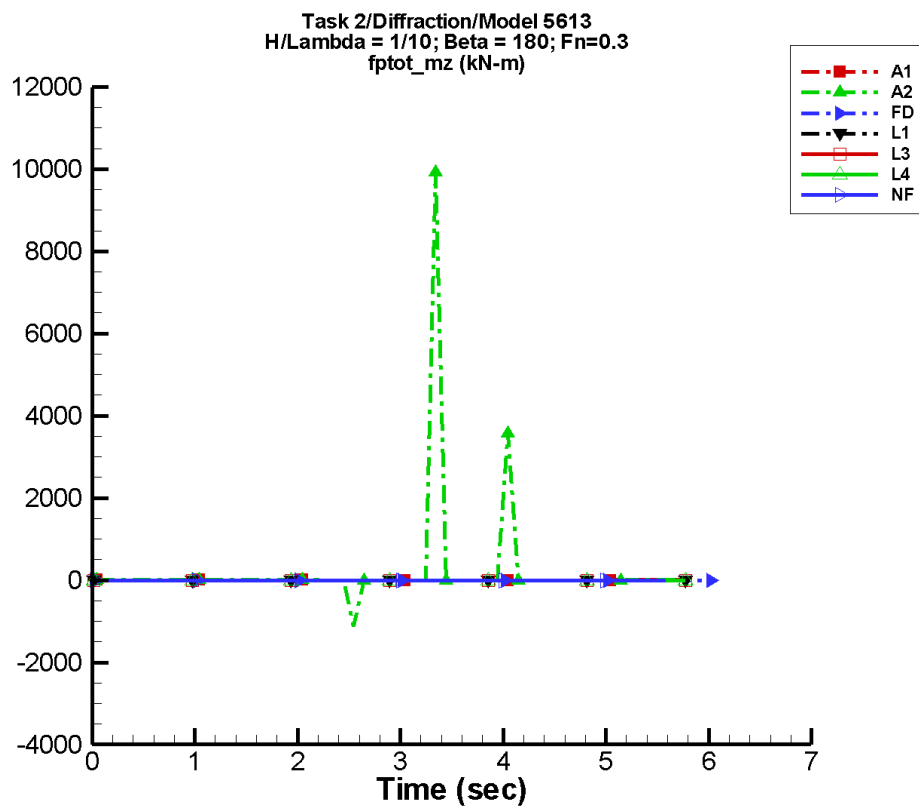
Table G–1029. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	220.	3.90E+04	-14	6.51E+04	-122
FD	921.	4.28E+04	-4	6.94E+04	-102
L1	—	—	—	—	—
L3	73.3	3.99E+04	-10	6.72E+04	-112
L4	73.3	3.99E+04	-10	6.72E+04	-112
NF	—	—	—	—	—
NS	629.	1.93E+04	12	8.23E+04	-91

Table G–1030. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-9.19E+04	9.63E+04	-7.67E+04	8.48E+04
FD	-8.67E+04	9.56E+04	-7.74E+04	9.10E+04
L1	—	—	—	—
L3	-8.53E+04	9.51E+04	-8.22E+04	9.30E+04
L4	-8.53E+04	9.51E+04	-8.22E+04	9.30E+04
NF	—	—	—	—
NS	-9.14E+04	1.00E+05	-8.90E+04	9.79E+04

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, NFA and NSHIPMO.

Figure G–516. Time history of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
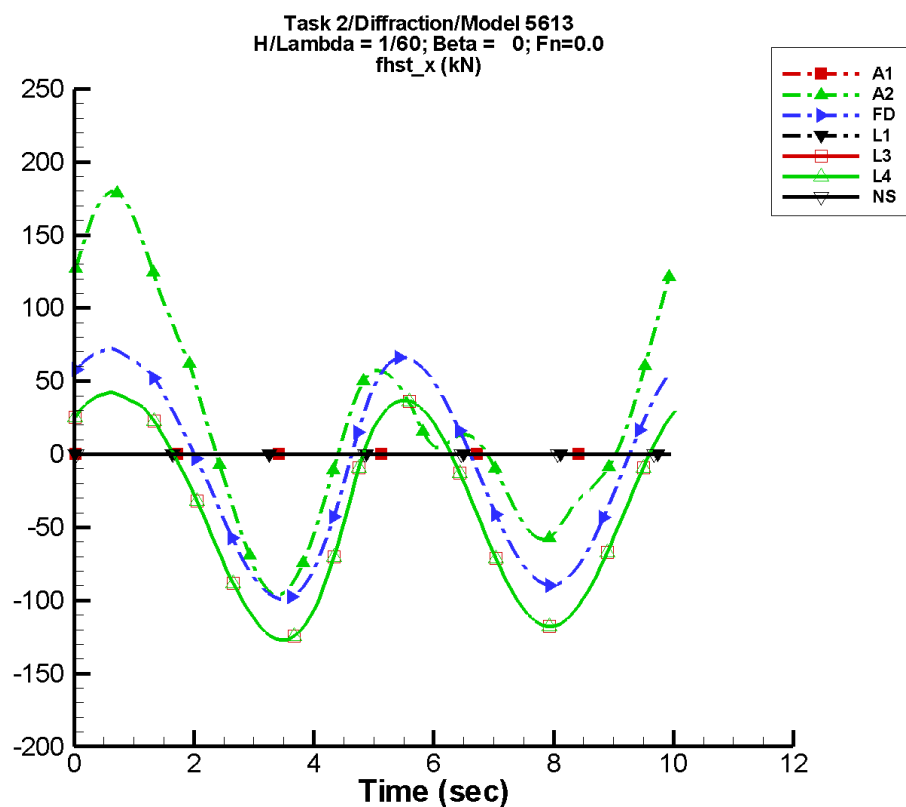
Table G–1031. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-2.17E+03	1.31E+05	-12	1.07E+05	-130
FD	814.	1.27E+05	-3	1.10E+05	-107
L1	—	—	—	—	—
L3	153.	1.22E+05	-8	1.07E+05	-116
L4	153.	1.22E+05	-8	1.07E+05	-116
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1032. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

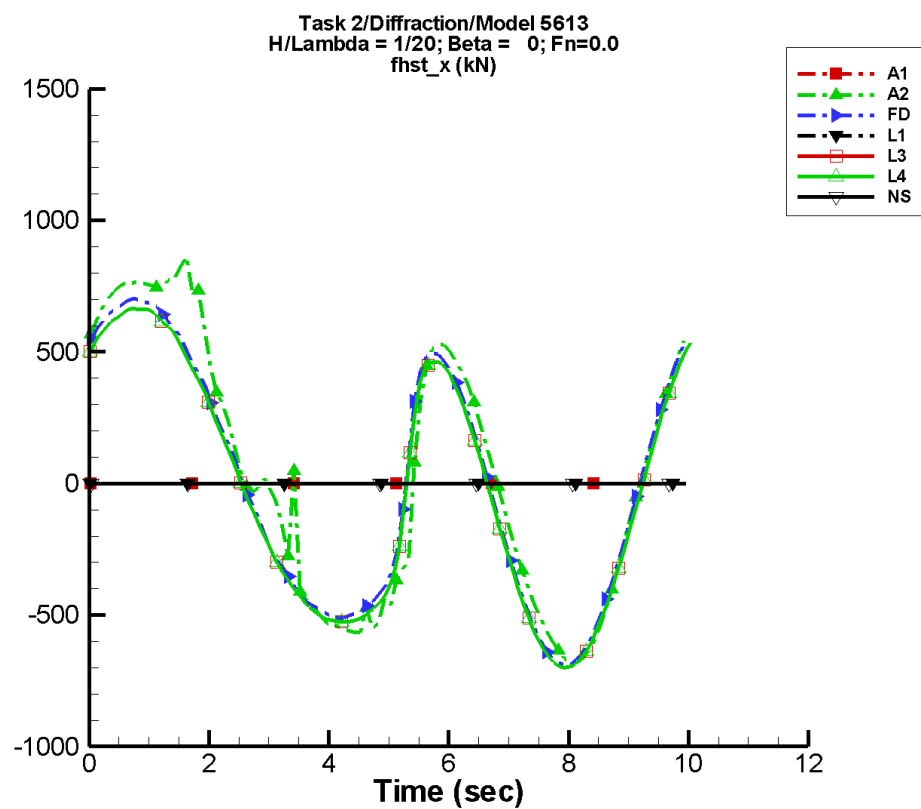| Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-1.60E+05	2.26E+05	-1.48E+05	2.07E+05
FD	-1.47E+05	2.05E+05	-1.40E+05	2.04E+05
L1	—	—	—	—
L3	-1.44E+05	2.03E+05	-1.40E+05	2.01E+05
L4	-1.44E+05	2.03E+05	-1.40E+05	2.01E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–517. Time history of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
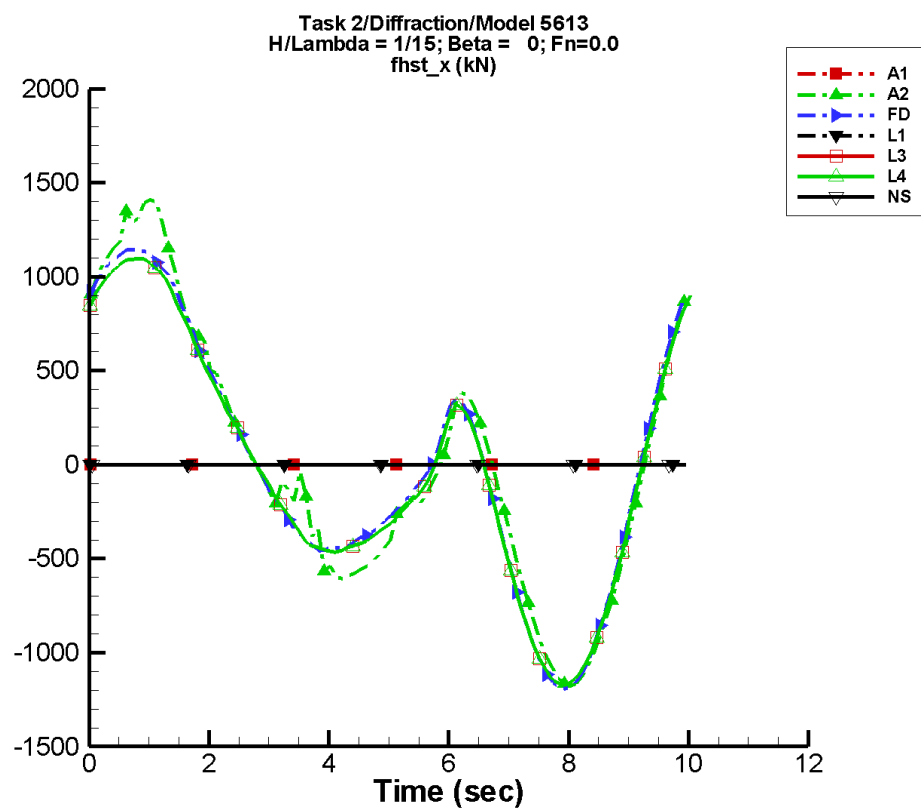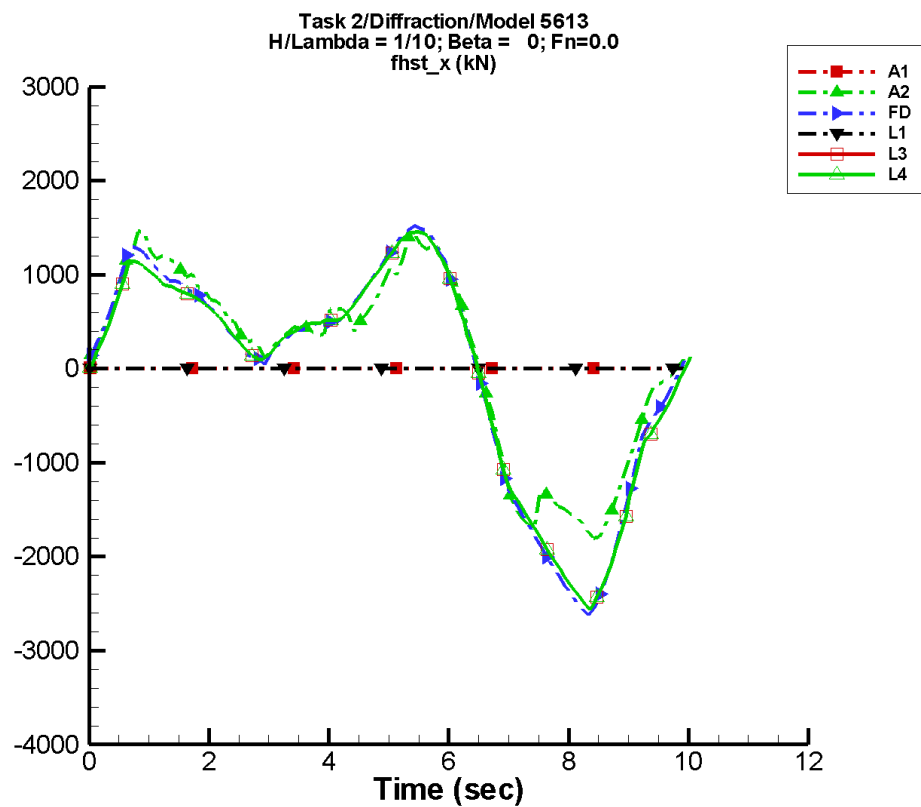
Table G–1033. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	4.69E-04	6.26E-04	74	1.97E-03	-115
FD	6.84E-03	2.12E-02	56	1.59E-02	148
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	3.58E-03	1.15E-02	-103	4.28E-03	96

Table G–1034. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-5.26E-03	9.20E-03	-1.63E-03	3.12E-03
FD	-9.05E-02	0.112	-3.25E-02	4.25E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-6.03E-02	4.79E-02	-1.44E-02	2.36E-02

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–518. Time history of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
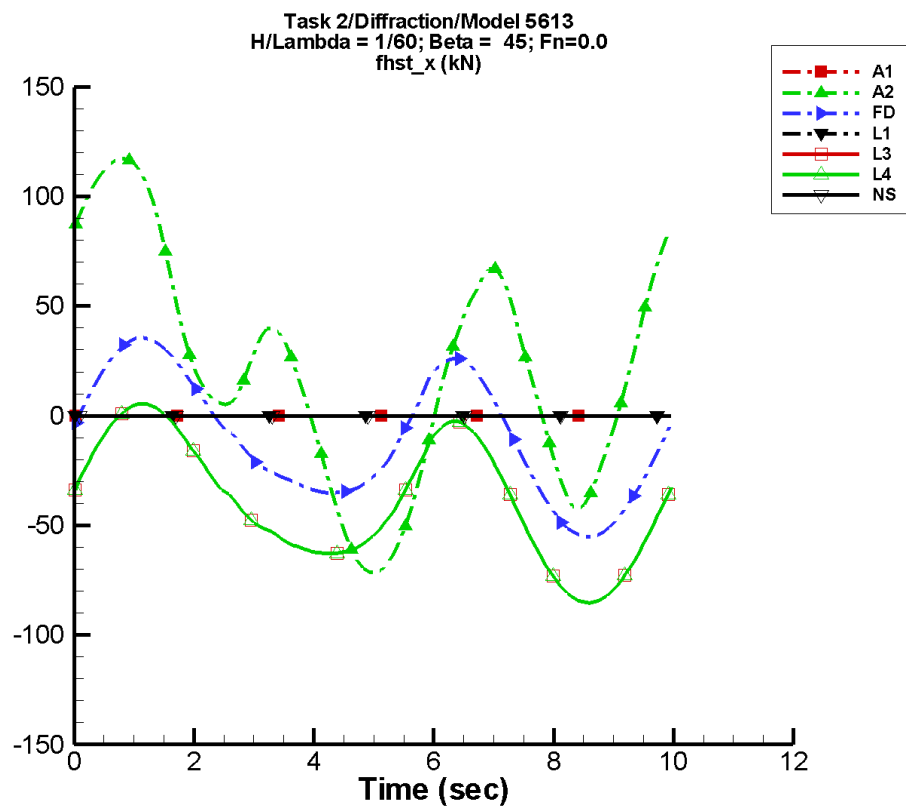
Table G–1035. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	1.46E+03	3.26E+03	14	4.16E+03	-60
FD	3.43E-04	4.21E-02	22	3.26E-02	-104
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	9.88E-04	1.01E-02	-81	7.18E-03	71

Table G–1036. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-1.59E-02	1.87E+05	-2.14E+03	2.49E+04
FD	-0.467	0.334	-7.12E-02	0.116
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-8.15E-02	8.33E-02	-2.86E-02	3.18E-02

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–519. Time history of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1037. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-386.	708.	-73	724.	-44
FD	-3.38E-03	1.40E-02	112	4.18E-02	-100
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.20E-02	1.20E-02	79	1.37E-02	-28

Table G–1038. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

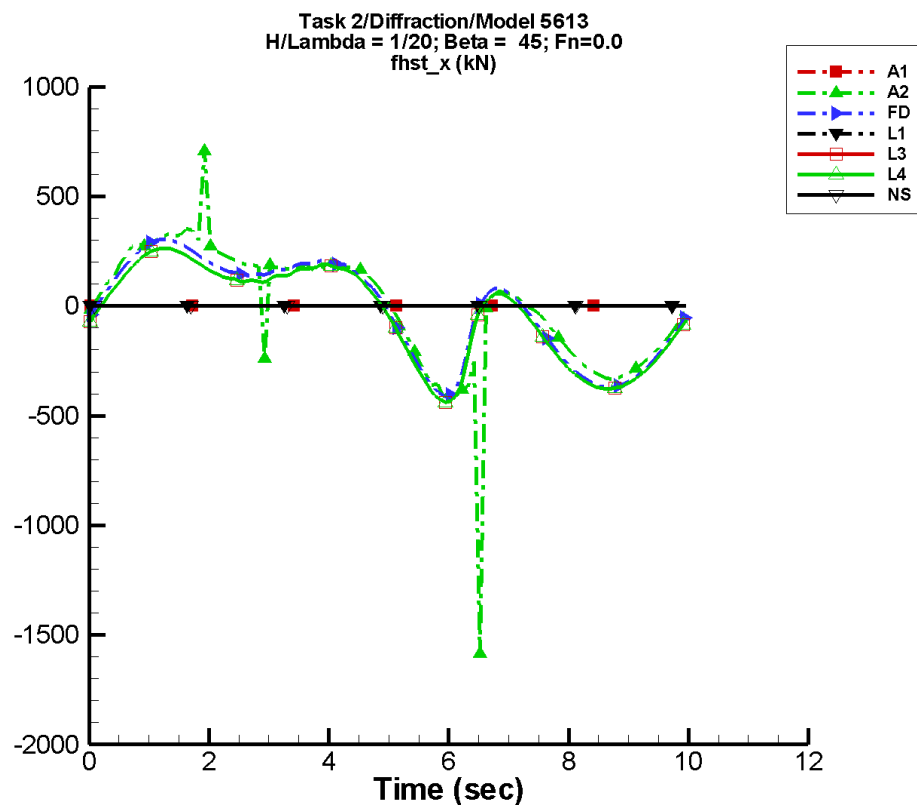| Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	—	—	—	—
A2	-2.12E+04	75.4	-2.83E+03	242.
FD	-0.887	0.716	-0.110	0.103
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.117	8.01E-02	-4.68E-02	3.24E-02

Data identically zero, insufficient, or not available from AEGIR-1, LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–520. Time history of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
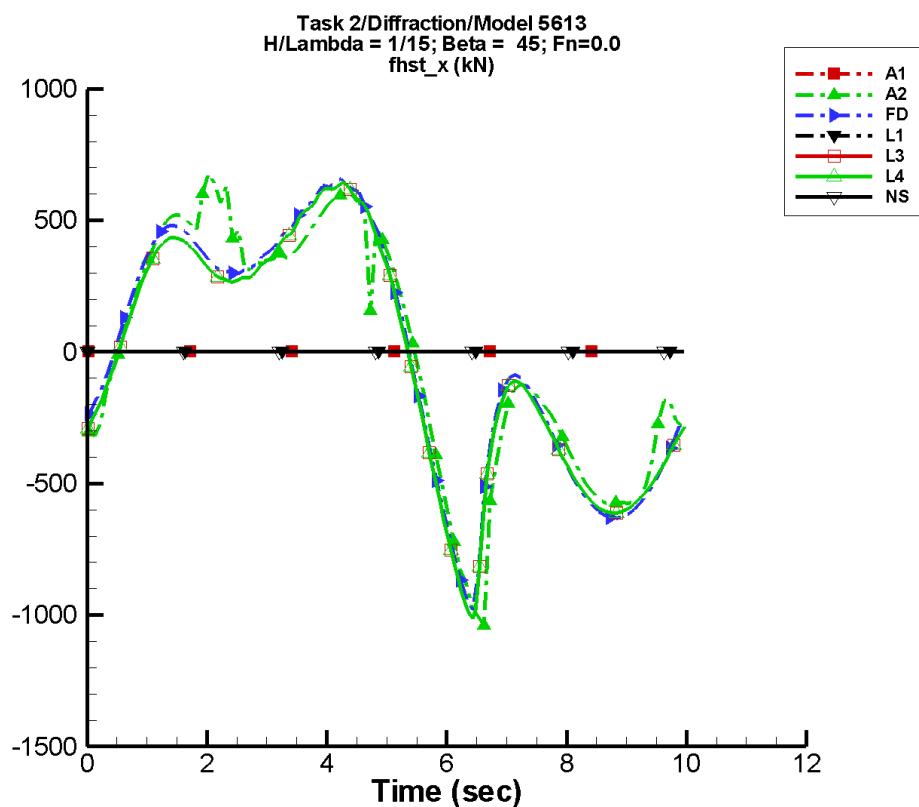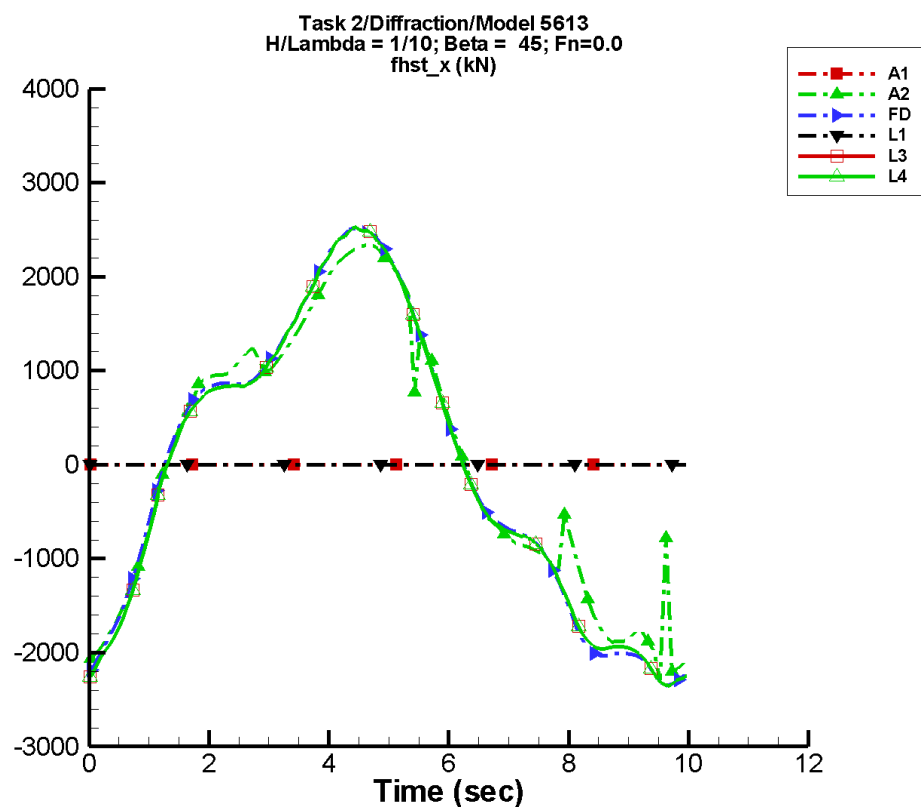
Table G–1039. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	—	—	—	—	—
A2	-108.	342.	26	419.	160
FD	-0.124	0.221	-83	0.436	-79
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1040. Minimum and maximum of of M_z^{hst} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	—	—	—	—
A2	-1.08E+04	5.17E+03	-1.48E+03	784.
FD	-2.64	1.66	-1.30	0.566
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 0; Fn=0.0
ffk_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–521. Time history of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
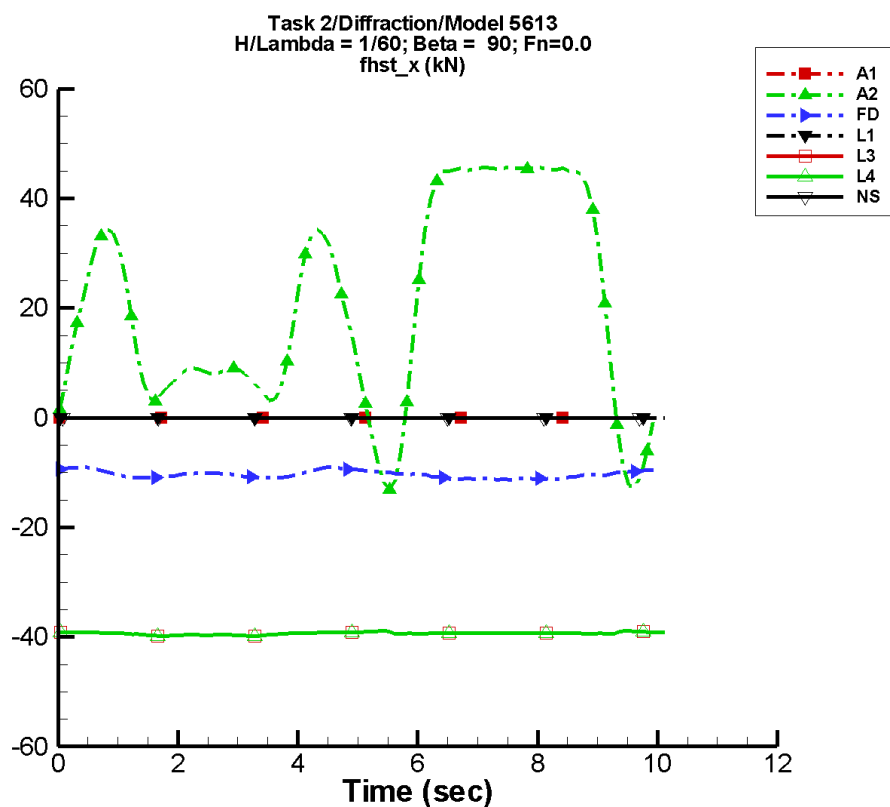
Table G–1041. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.06	1.42E+03	90	1.51	28
A2	2.68	1.41E+03	90	161.	-149
FD	1.99	1.40E+03	88	157.	-152
L1	-1.27	1.40E+03	90	1.18	109
L3	0.426	1.38E+03	91	150.	-141
L4	0.426	1.38E+03	91	150.	-141
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1042. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.42E+03	1.42E+03	-1.40E+03	1.41E+03
A2	-1.54E+03	1.34E+03	-1.52E+03	1.33E+03
FD	-1.53E+03	1.33E+03	-1.50E+03	1.32E+03
L1	-1.40E+03	1.40E+03	-1.39E+03	1.39E+03
L3	-1.52E+03	1.31E+03	-1.51E+03	1.31E+03
L4	-1.52E+03	1.31E+03	-1.51E+03	1.31E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.0
ffk_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–522. Time history of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
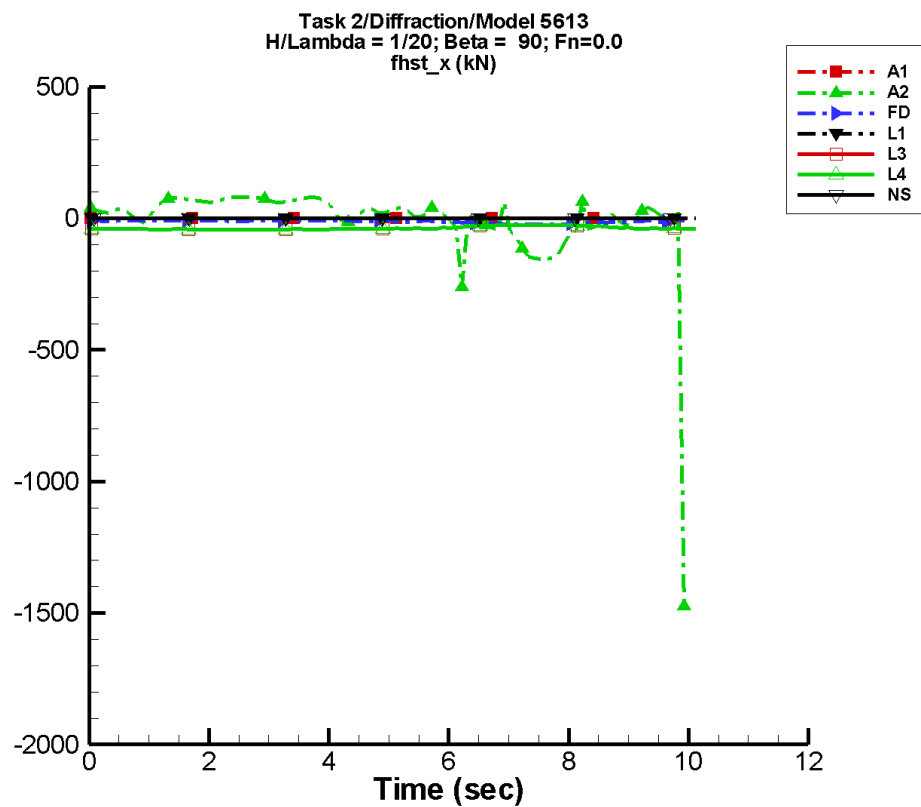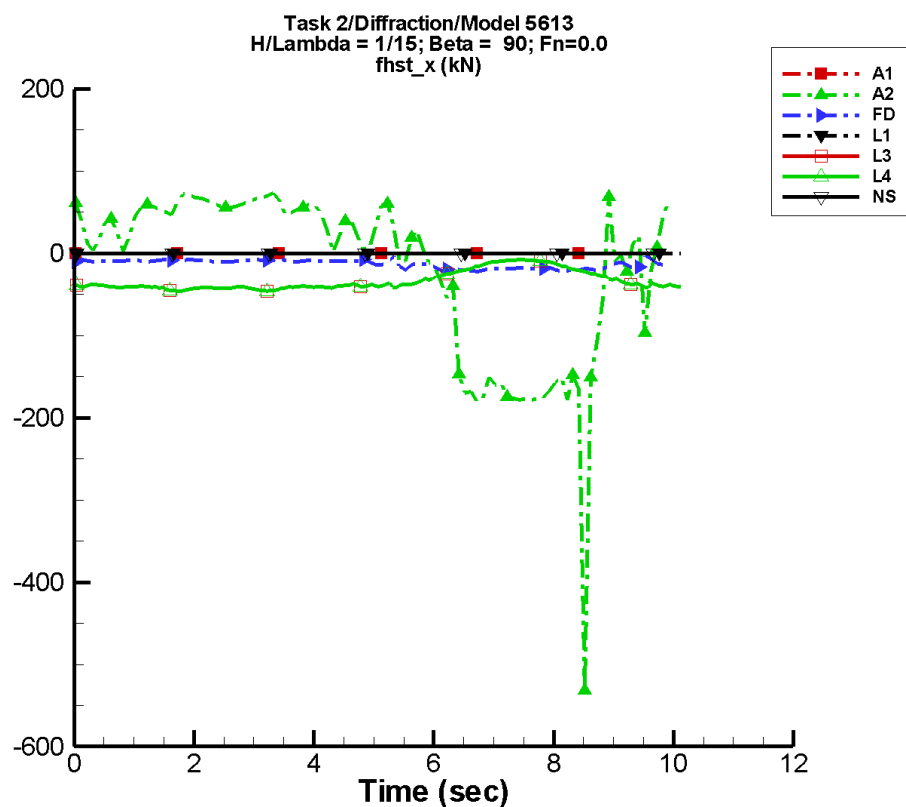
Table G–1043. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-3.20	4.27E+03	90	4.55	28
A2	62.4	4.08E+03	90	1.17E+03	-164
FD	18.4	4.07E+03	91	1.16E+03	-164
L1	-3.80	4.19E+03	90	3.54	109
L3	12.6	3.74E+03	95	1.05E+03	-157
L4	12.6	3.74E+03	95	1.05E+03	-157
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1044. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-4.27E+03	4.27E+03	-4.22E+03	4.23E+03
A2	-5.05E+03	4.31E+03	-4.82E+03	4.23E+03
FD	-5.06E+03	4.18E+03	-4.83E+03	4.12E+03
L1	-4.20E+03	4.19E+03	-4.18E+03	4.18E+03
L3	-4.70E+03	3.79E+03	-4.60E+03	3.77E+03
L4	-4.70E+03	3.79E+03	-4.60E+03	3.77E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 0; Fn=0.0
ffk_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–523. Time history of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
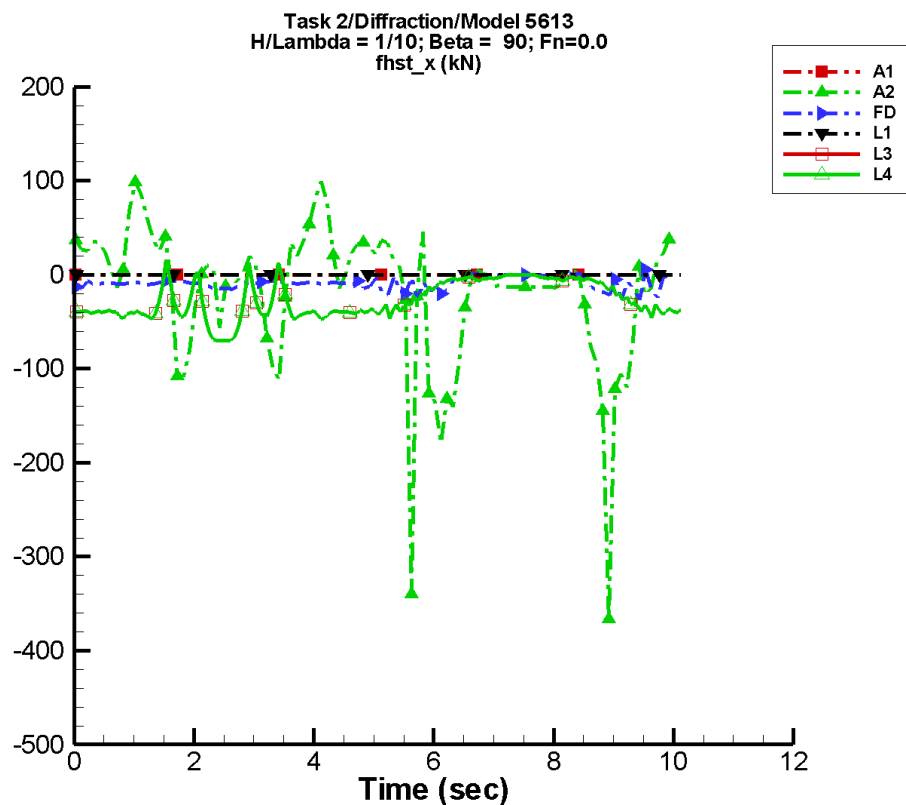
Table G–1045. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-4.27	5.70E+03	90	6.08	28
A2	107.	5.53E+03	95	1.77E+03	-160
FD	17.6	5.37E+03	95	1.72E+03	-163
L1	-5.06	5.59E+03	90	4.72	109
L3	11.2	4.73E+03	98	1.49E+03	-155
L4	11.2	4.73E+03	98	1.49E+03	-155
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1046. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-5.70E+03	5.70E+03	-5.64E+03	5.65E+03
A2	-6.39E+03	6.23E+03	-6.26E+03	6.12E+03
FD	-6.24E+03	5.90E+03	-6.13E+03	5.80E+03
L1	-5.59E+03	5.59E+03	-5.57E+03	5.57E+03
L3	-5.48E+03	5.14E+03	-5.44E+03	5.10E+03
L4	-5.48E+03	5.14E+03	-5.44E+03	5.10E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–524. Time history of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
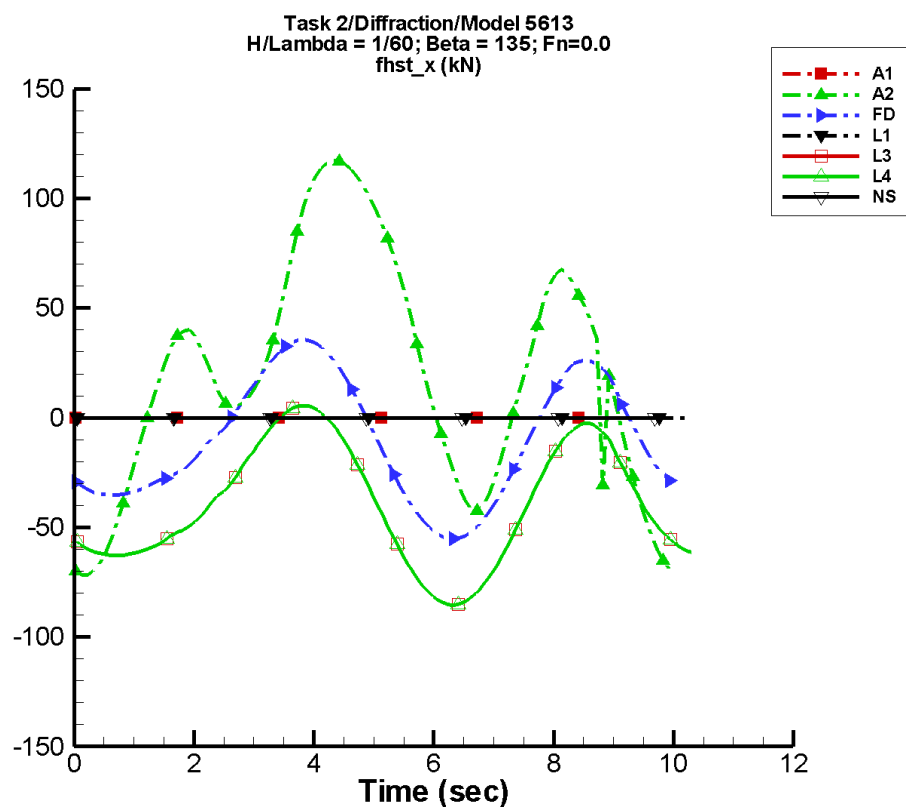
Table G–1047. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-6.40	8.55E+03	90	9.12	28
A2	344.	1.04E+04	99	3.82E+03	-155
FD	21.4	9.33E+03	98	3.19E+03	-157
L1	-7.59	8.39E+03	90	7.09	109
L3	-0.647	7.73E+03	101	2.52E+03	-150
L4	-0.647	7.73E+03	101	2.52E+03	-150
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1048. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
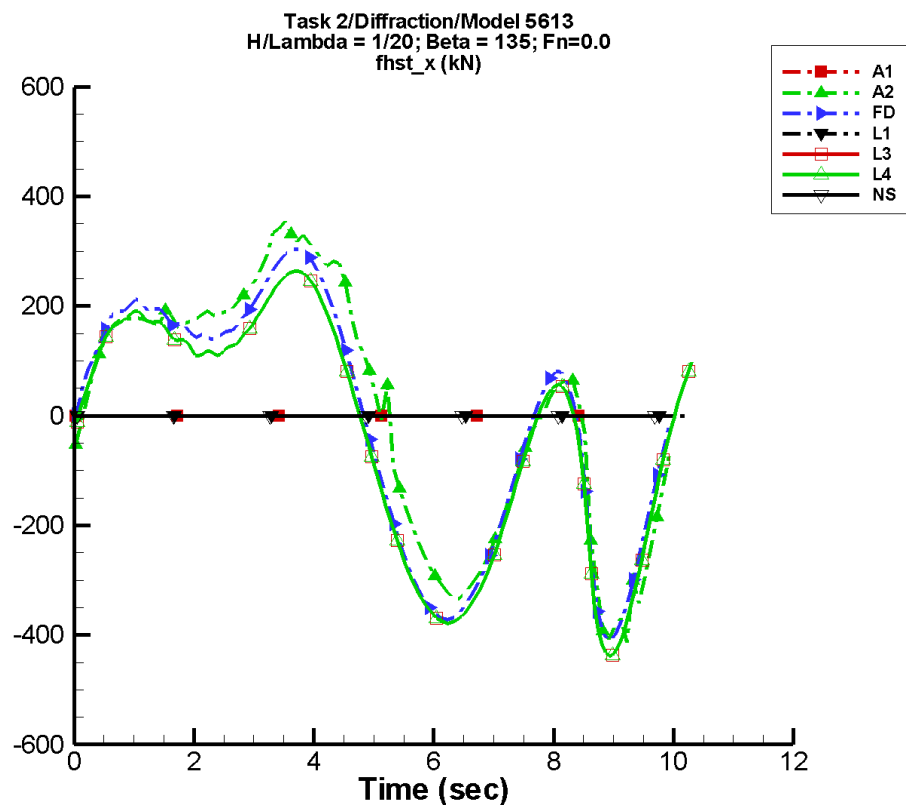
Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-8.55E+03	8.55E+03	-8.46E+03	8.47E+03
A2	-1.27E+04	1.23E+04	-1.22E+04	1.19E+04
FD	-1.13E+04	1.06E+04	-1.11E+04	1.04E+04
L1	-8.39E+03	8.39E+03	-8.36E+03	8.36E+03
L3	-9.39E+03	8.68E+03	-9.30E+03	8.63E+03
L4	-9.39E+03	8.68E+03	-9.30E+03	8.63E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–525. Time history of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
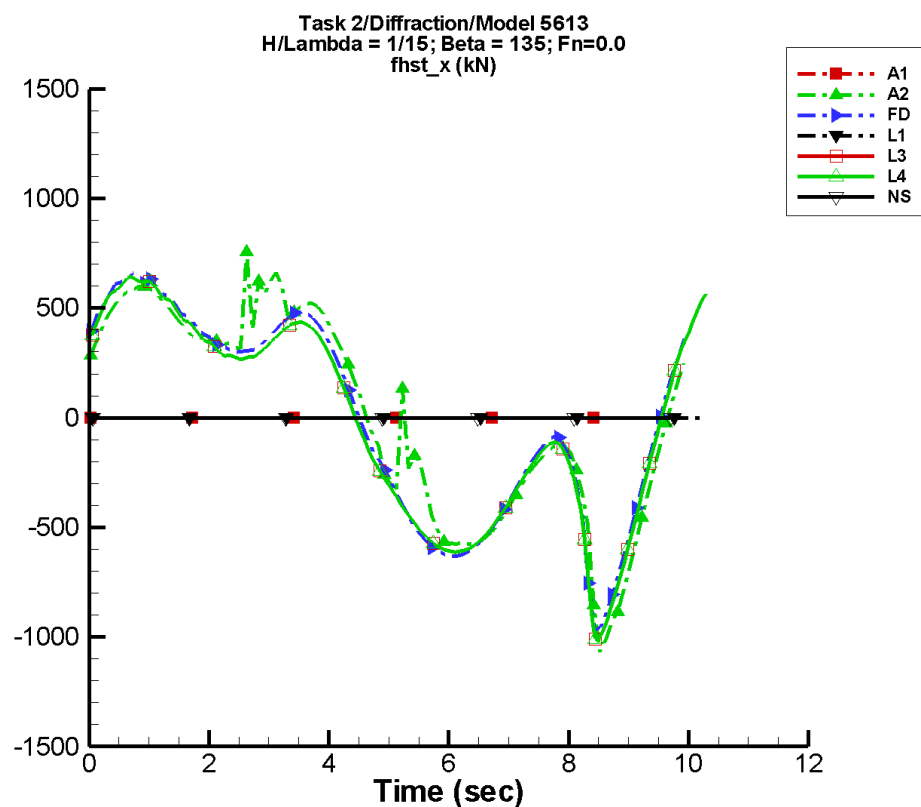
Table G–1049. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.40	1.77E+03	87	1.96	25
A2	1.47	1.78E+03	83	80.0	168
FD	-4.10E-02	1.75E+03	84	76.9	164
L1	-0.660	1.73E+03	87	1.15	162
L3	-0.638	1.73E+03	88	85.0	174
L4	-0.638	1.73E+03	88	85.0	174
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1050. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.77E+03	1.77E+03	-1.76E+03	1.77E+03
A2	-1.77E+03	1.78E+03	-1.76E+03	1.78E+03
FD	-1.74E+03	1.77E+03	-1.72E+03	1.75E+03
L1	-1.73E+03	1.73E+03	-1.73E+03	1.73E+03
L3	-1.72E+03	1.73E+03	-1.71E+03	1.73E+03
L4	-1.72E+03	1.73E+03	-1.71E+03	1.73E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–526. Time history of F_x^{ffk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
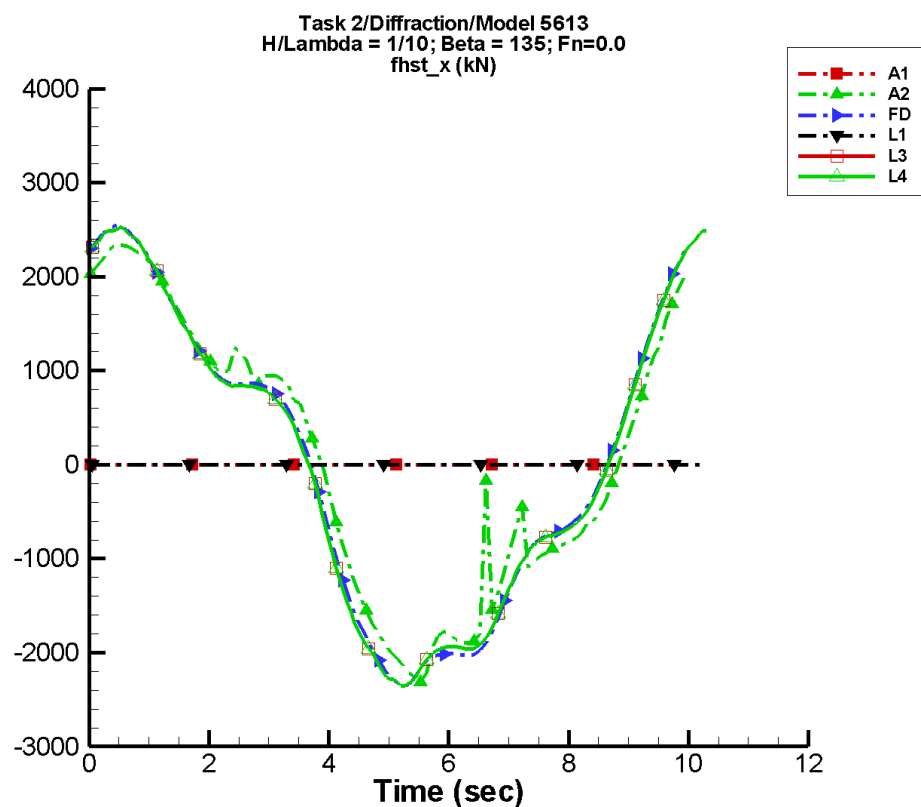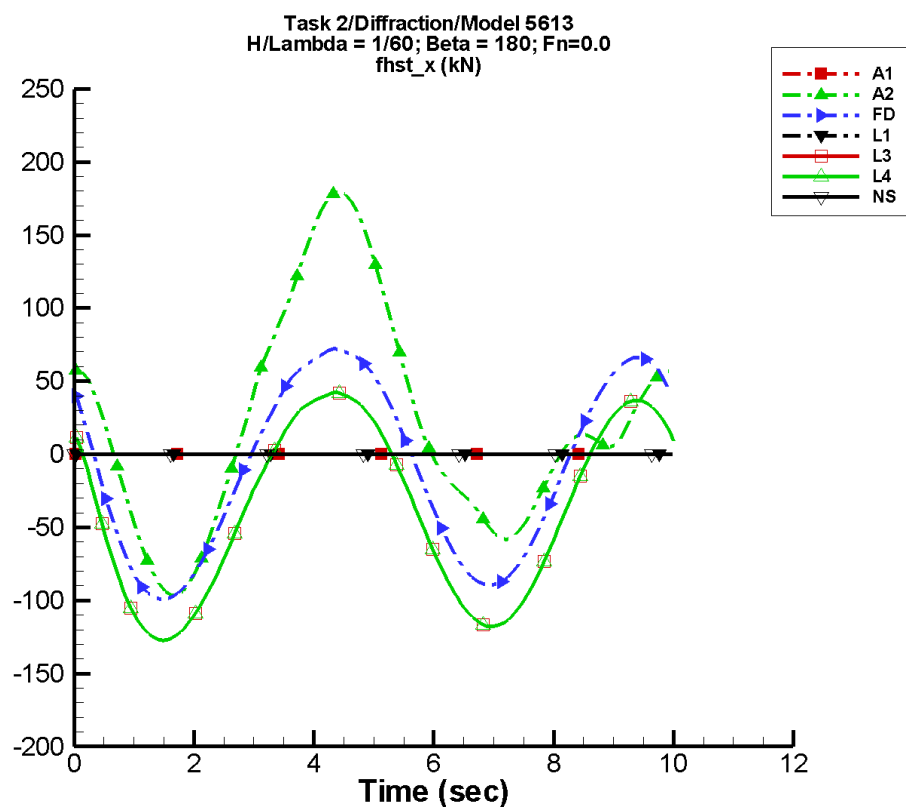
Table G–1051. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-4.20	5.34E+03	87	5.90	25
A2	47.1	5.60E+03	86	362.	152
FD	-14.9	5.44E+03	87	334.	152
L1	-1.98	5.20E+03	87	3.46	162
L3	-9.61	4.98E+03	91	314.	165
L4	-9.61	4.98E+03	91	314.	165
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1052. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-5.34E+03	5.34E+03	-5.28E+03	5.33E+03
A2	-5.49E+03	5.90E+03	-5.42E+03	5.84E+03
FD	-5.40E+03	5.69E+03	-5.33E+03	5.62E+03
L1	-5.20E+03	5.20E+03	-5.18E+03	5.20E+03
L3	-4.92E+03	5.16E+03	-4.90E+03	5.14E+03
L4	-4.92E+03	5.16E+03	-4.90E+03	5.14E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–527. Time history of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1053. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
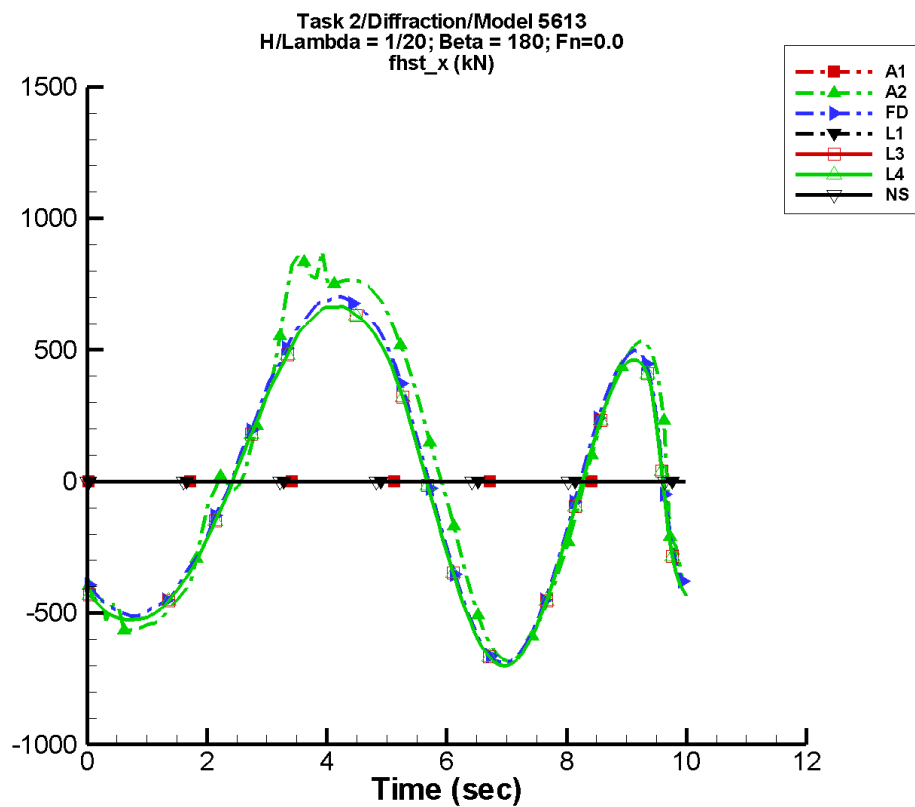
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-5.61	7.12E+03	87	7.87	25
A2	78.5	7.88E+03	89	461.	149
FD	-27.2	7.50E+03	90	318.	160
L1	-2.64	6.93E+03	87	4.61	162
L3	-3.41	6.61E+03	94	269.	-179
L4	-3.41	6.61E+03	94	269.	-179
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1054. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-7.12E+03	7.12E+03	-7.05E+03	7.11E+03
A2	-7.92E+03	8.45E+03	-7.79E+03	8.38E+03
FD	-7.72E+03	7.93E+03	-7.62E+03	7.82E+03
L1	-6.93E+03	6.93E+03	-6.91E+03	6.94E+03
L3	-6.81E+03	6.87E+03	-6.77E+03	6.85E+03
L4	-6.81E+03	6.87E+03	-6.77E+03	6.85E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–528. Time history of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
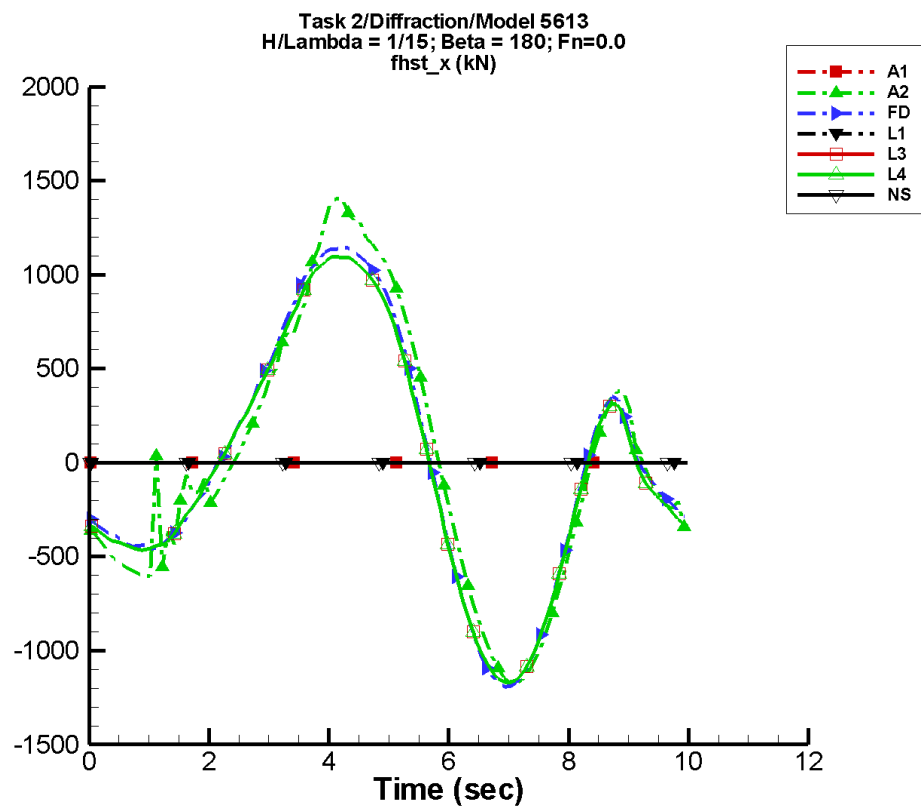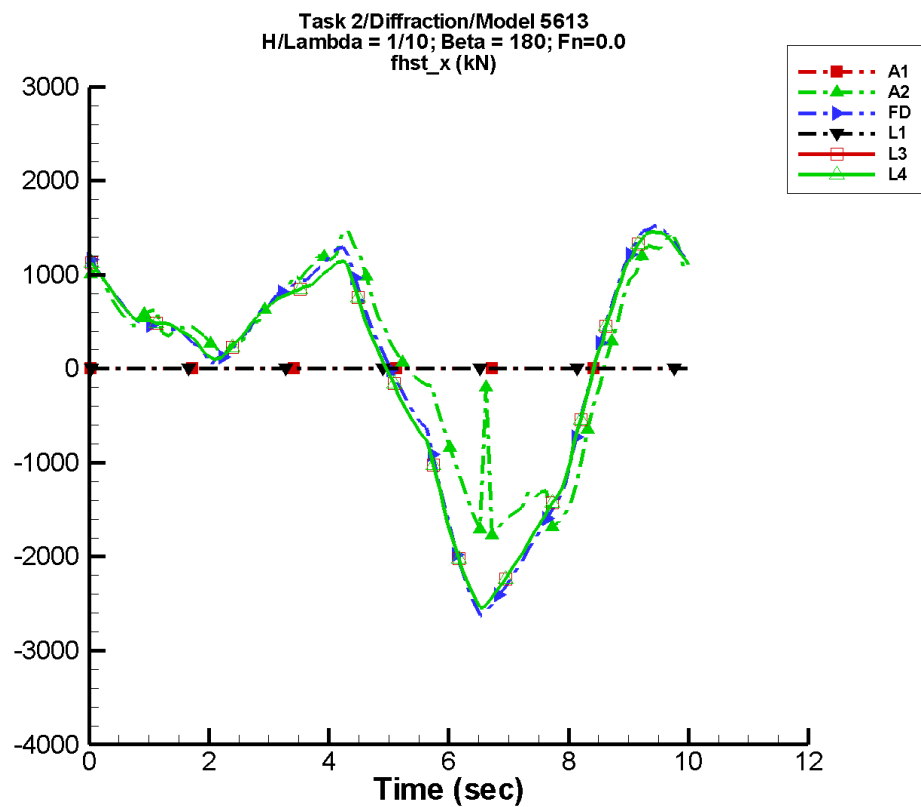
Table G–1055. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-8.42	1.07E+04	87	11.8	25
A2	115.	1.45E+04	92	844.	150
FD	-25.7	1.34E+04	92	619.	169
L1	-3.96	1.04E+04	87	6.91	162
L3	0.739	1.11E+04	96	470.	-175
L4	0.739	1.11E+04	96	470.	-175
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1056. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.07E+04	1.07E+04	-1.06E+04	1.07E+04
A2	-1.51E+04	1.58E+04	-1.48E+04	1.52E+04
FD	-1.39E+04	1.41E+04	-1.37E+04	1.39E+04
L1	-1.04E+04	1.04E+04	-1.04E+04	1.04E+04
L3	-1.16E+04	1.16E+04	-1.15E+04	1.15E+04
L4	-1.16E+04	1.16E+04	-1.15E+04	1.15E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–529. Time history of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
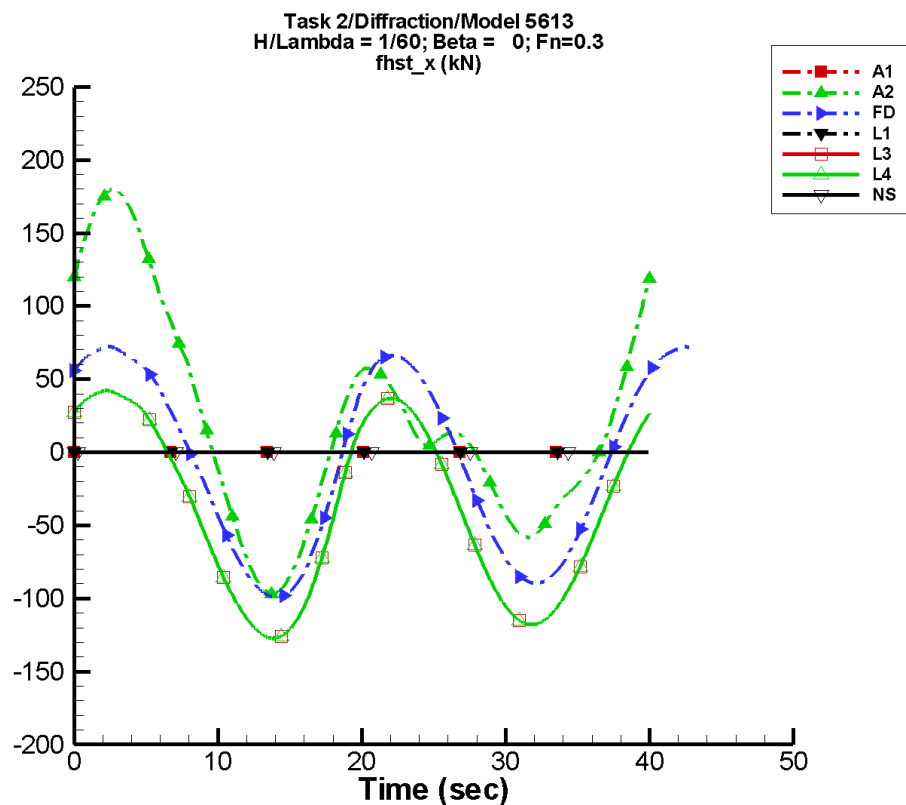
Table G–1057. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.10E-03	12.8	176	1.23E-02	155
A2	2.82	30.2	-8	0.754	-94
FD	1.27	1.30	172	0.685	-106
L1	8.19E-03	19.8	176	1.30E-02	143
L3	0.673	11.3	176	0.497	-98
L4	0.673	11.3	176	0.497	-98
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1058. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
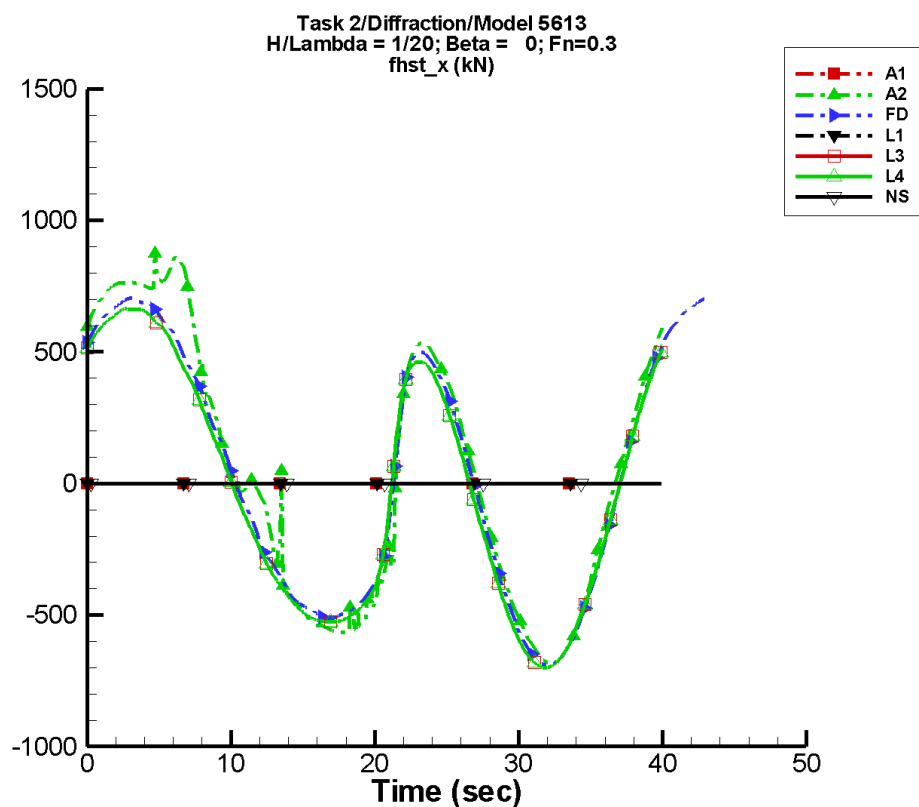
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-12.8	12.8	-12.7	12.7
A2	-27.0	33.5	-26.8	33.2
FD	0.131	3.28	0.238	3.20
L1	-19.8	19.8	-19.7	19.7
L3	-10.3	12.5	-10.3	12.4
L4	-10.3	12.5	-10.3	12.4
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–530. Time history of F_x^{ffk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
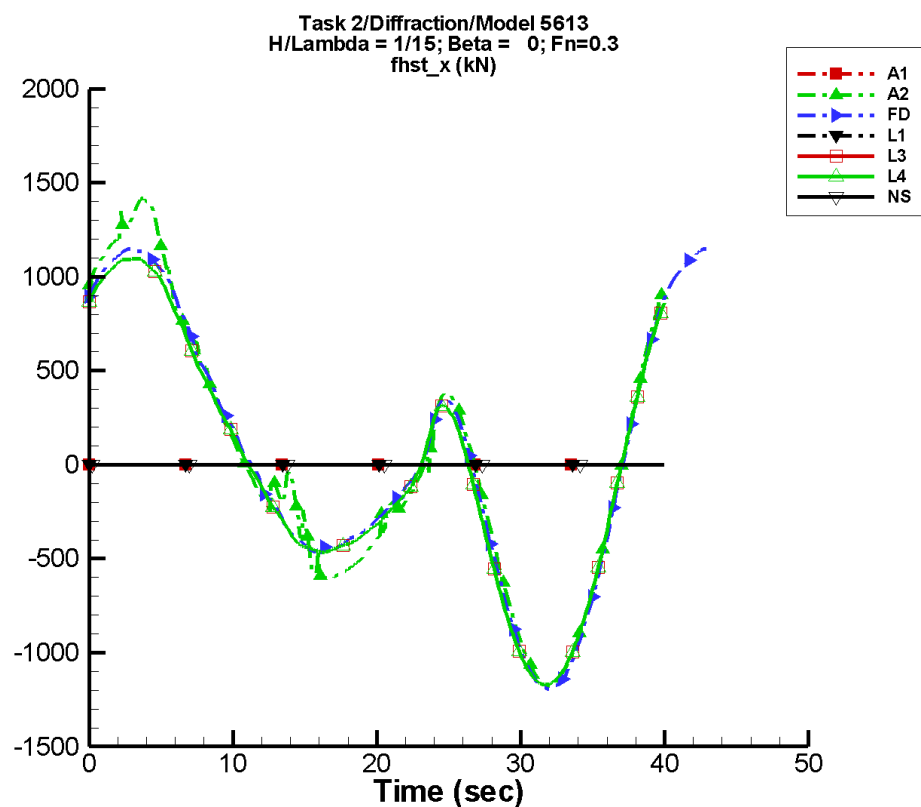
Table G–1059. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	2.44E-02	38.6	176	3.69E-02	155
A2	50.5	100.	-7	64.8	-110
FD	5.39	6.81	171	3.96	-108
L1	2.45E-02	59.3	176	3.90E-02	143
L3	-1.25	24.8	177	2.29	88
L4	-1.25	24.8	177	2.29	88
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1060. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-38.5	38.6	-38.1	38.2
A2	-405.	228.	-72.2	209.
FD	-0.780	18.6	0.652	17.9
L1	-59.3	59.3	-59.1	59.1
L3	-26.9	20.3	-26.4	18.8
L4	-26.9	20.3	-26.4	18.8
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–531. Time history of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
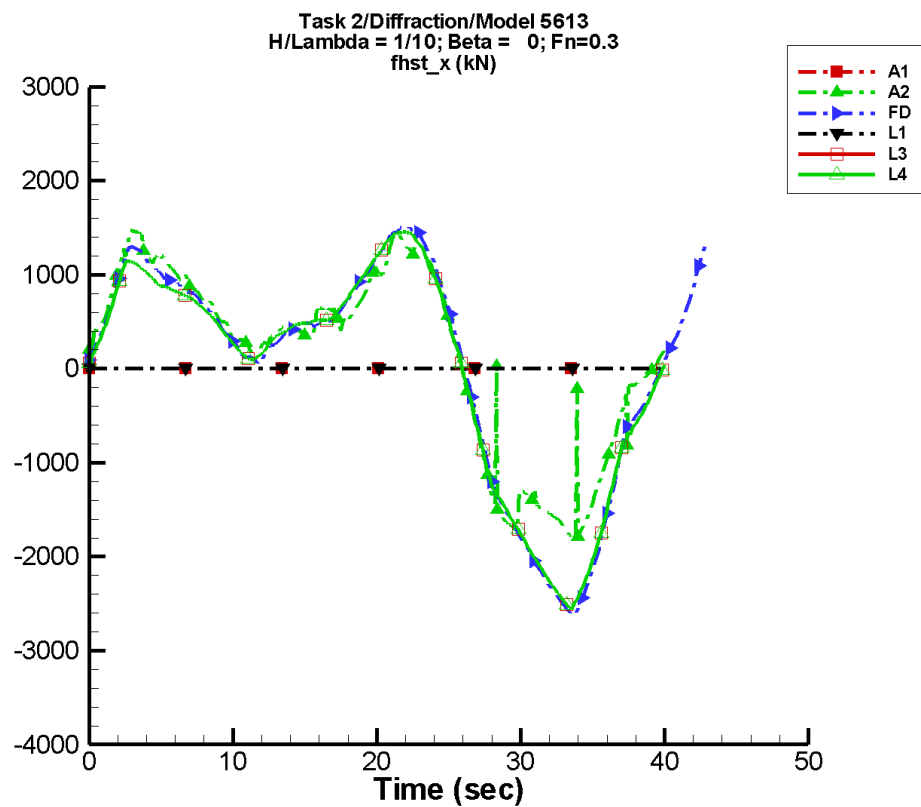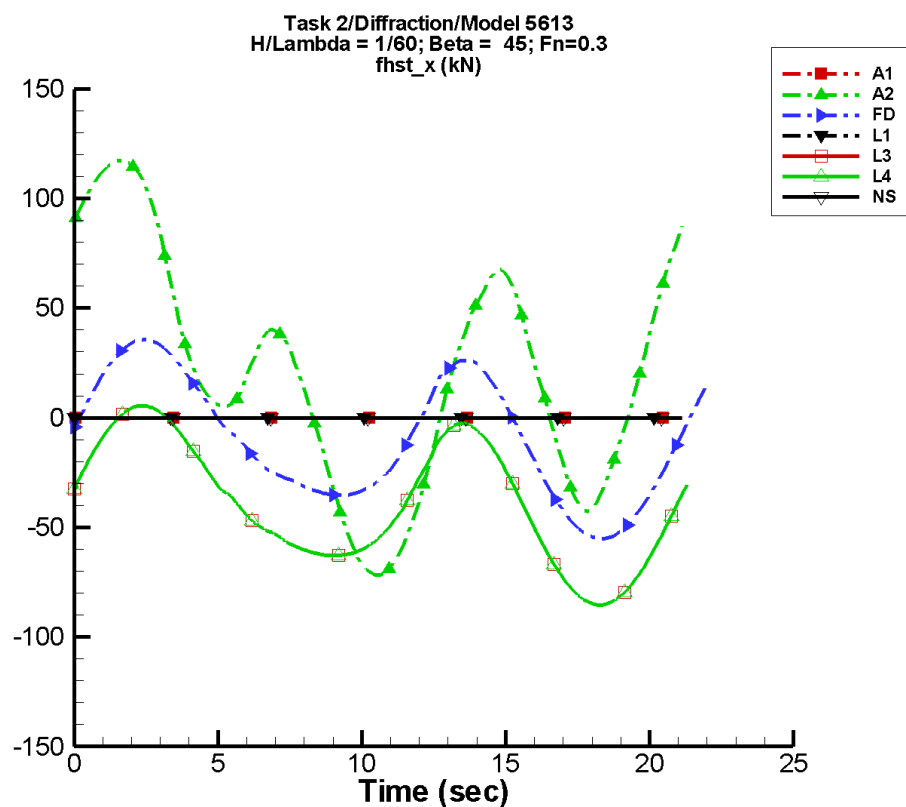
Table G–1061. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	3.25E-02	51.5	176	4.93E-02	155
A2	115.	113.	-6	114.	-108
FD	6.81	8.19	173	4.20	-104
L1	3.27E-02	79.1	176	5.21E-02	143
L3	-5.15	25.2	178	6.55	86
L4	-5.15	25.2	178	6.55	86
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1062. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-51.5	51.5	-50.9	50.9
A2	-61.7	341.	-18.5	338.
FD	-4.21	20.2	0.857	18.0
L1	-79.1	79.1	-78.8	78.8
L3	-35.7	20.2	-34.9	18.9
L4	-35.7	20.2	-34.9	18.9
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–532. Time history of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1063. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	4.88E-02	77.2	176	7.40E-02	155
A2	171.	250.	-8	123.	-107
FD	3.67	0.751	-147	1.46	52
L1	4.91E-02	119.	176	7.80E-02	143
L3	-14.5	31.2	178	12.3	89
L4	-14.5	31.2	178	12.3	89
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1064. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
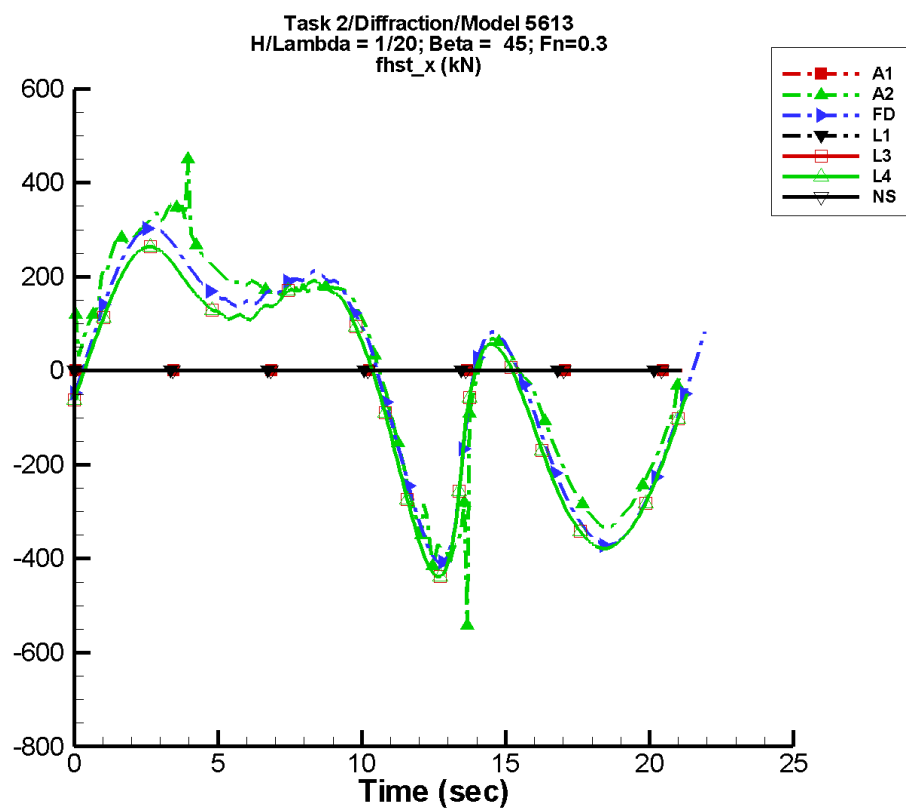
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-77.2	77.2	-76.4	76.4
A2	-79.7	618.	-6.44	559.
FD	-11.4	21.8	-0.616	11.7
L1	-119.	119.	-118.	118.
L3	-102.	22.4	-64.2	17.9
L4	-102.	22.4	-64.2	17.9
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.0
ffk_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–533. Time history of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
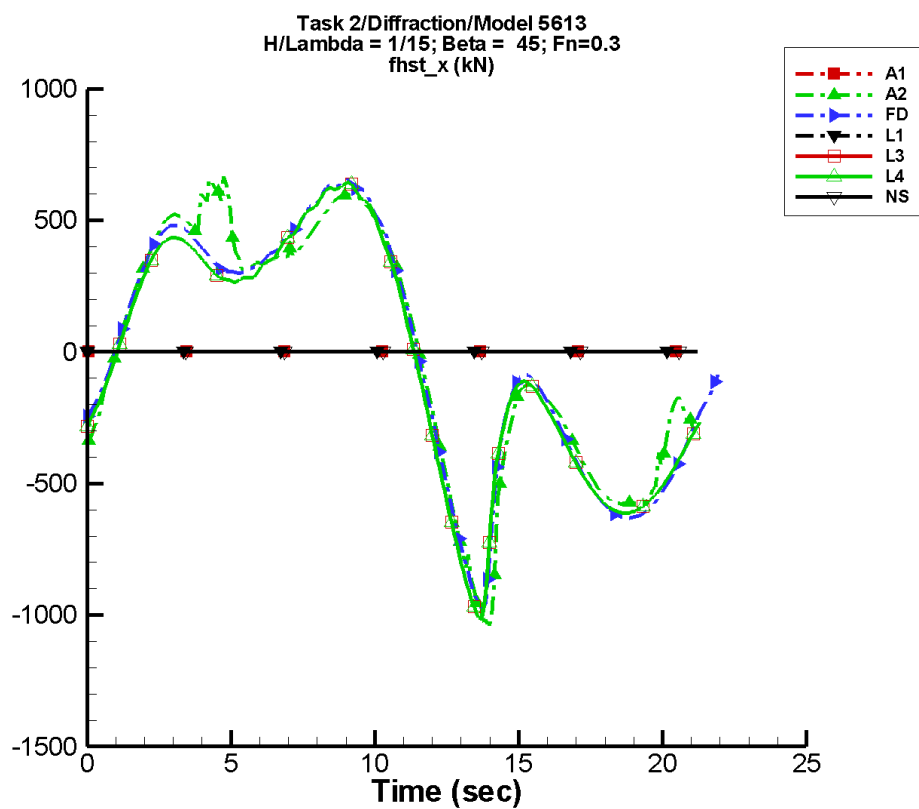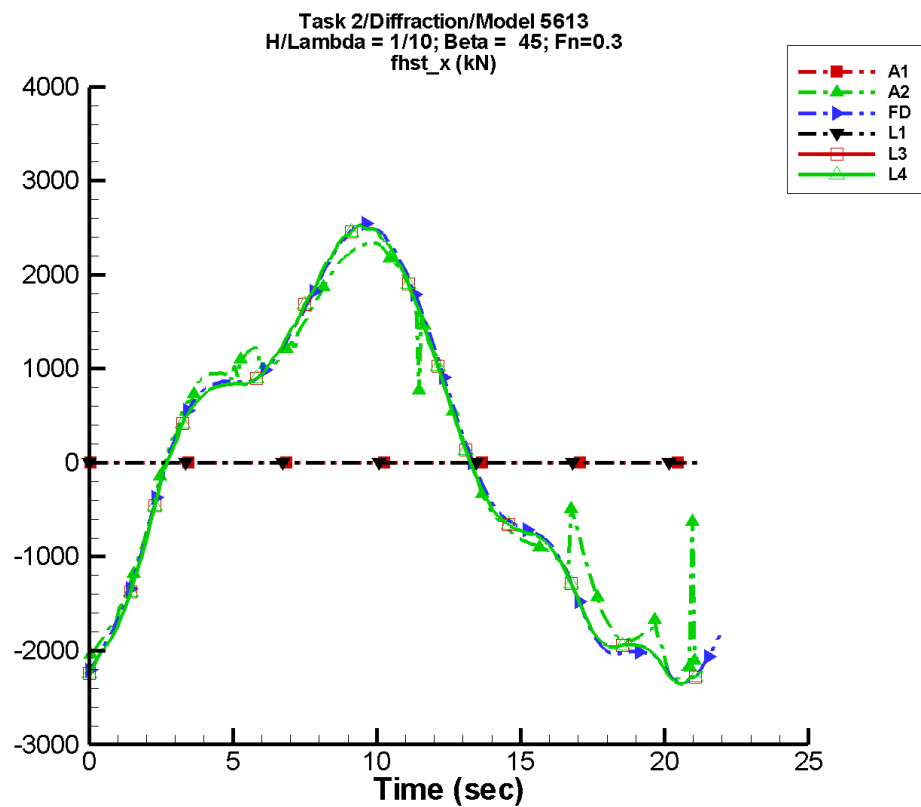
Table G–1065. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.45	1.77E+03	-96	2.01	-156
A2	4.51	1.78E+03	-99	78.3	-19
FD	1.97	1.76E+03	-100	77.5	-18
L1	1.83	1.73E+03	-96	1.22	-101
L3	2.08	1.73E+03	-96	85.5	-13
L4	2.08	1.73E+03	-96	85.5	-13
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1066. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.77E+03	1.77E+03	-1.78E+03	1.76E+03
A2	-1.77E+03	1.78E+03	-1.77E+03	1.77E+03
FD	-1.74E+03	1.77E+03	-1.73E+03	1.75E+03
L1	-1.73E+03	1.73E+03	-1.73E+03	1.73E+03
L3	-1.72E+03	1.73E+03	-1.71E+03	1.73E+03
L4	-1.72E+03	1.73E+03	-1.71E+03	1.73E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 135; Fn=0.0
ffk_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–534. Time history of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
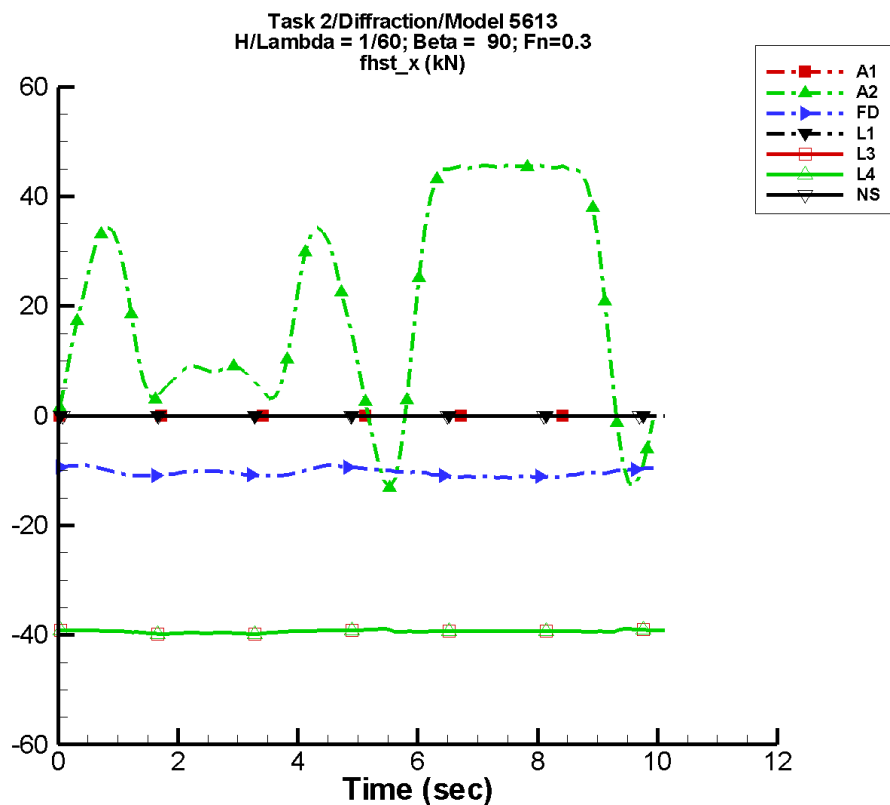
Table G–1067. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	4.36	5.34E+03	-96	6.05	-156
A2	49.0	5.64E+03	-102	331.	-3
FD	-4.54	5.50E+03	-103	375.	-11
L1	5.50	5.20E+03	-96	3.67	-101
L3	0.349	5.01E+03	-99	347.	-1
L4	0.349	5.01E+03	-99	347.	-1
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1068. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-5.34E+03	5.34E+03	-5.34E+03	5.28E+03
A2	-5.49E+03	5.90E+03	-5.48E+03	5.83E+03
FD	-5.40E+03	5.69E+03	-5.40E+03	5.62E+03
L1	-5.20E+03	5.20E+03	-5.19E+03	5.18E+03
L3	-4.92E+03	5.16E+03	-4.91E+03	5.14E+03
L4	-4.92E+03	5.16E+03	-4.91E+03	5.14E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–535. Time history of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
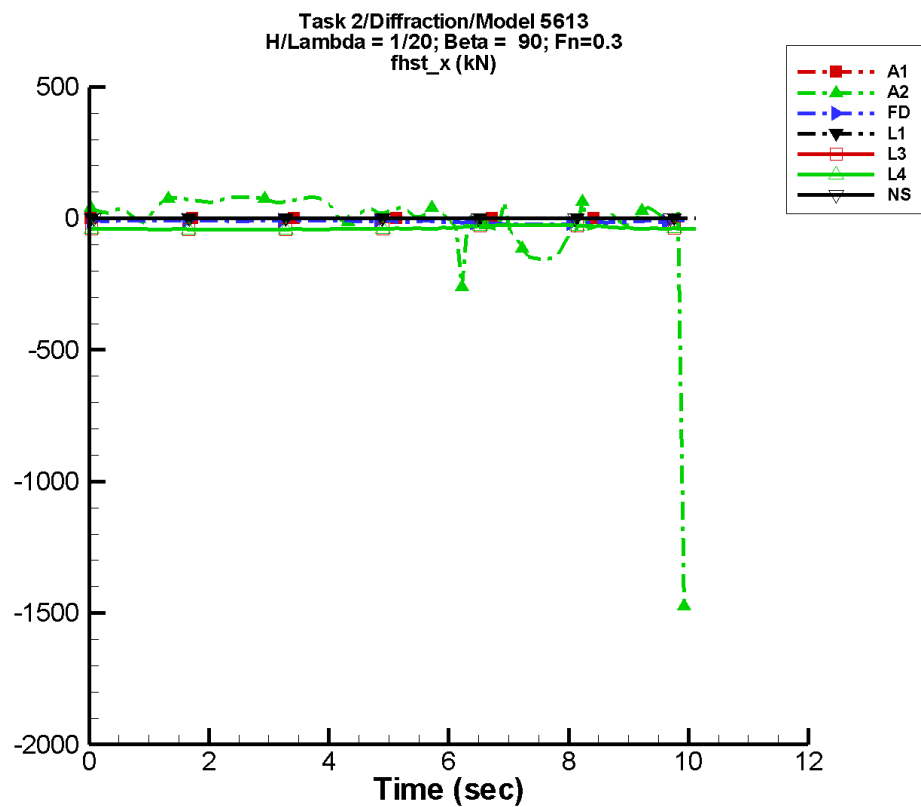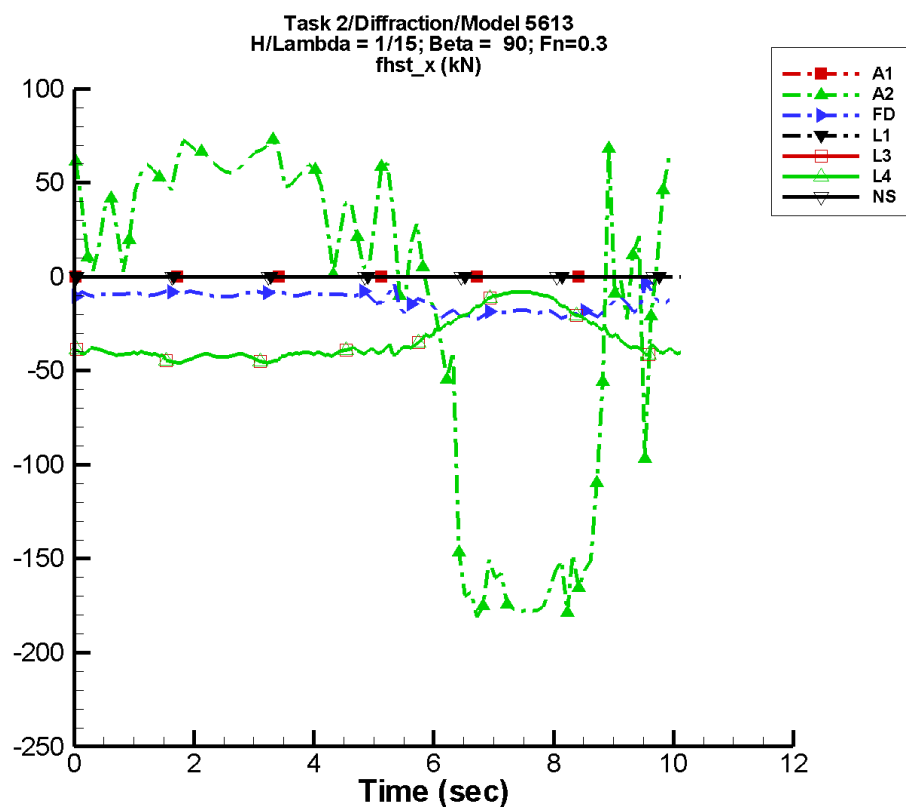
Table G–1069. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	5.83	7.12E+03	-96	8.08	-156
A2	103.	7.98E+03	-105	380.	-6
FD	-23.1	7.61E+03	-105	427.	-15
L1	7.33	6.93E+03	-96	4.90	-101
L3	1.16	6.64E+03	-102	312.	-6
L4	1.16	6.64E+03	-102	312.	-6
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1070. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-7.12E+03	7.12E+03	-7.13E+03	7.05E+03
A2	-7.92E+03	9.17E+03	-7.85E+03	8.46E+03
FD	-7.72E+03	7.93E+03	-7.71E+03	7.83E+03
L1	-6.93E+03	6.93E+03	-6.92E+03	6.91E+03
L3	-6.81E+03	6.87E+03	-6.77E+03	6.85E+03
L4	-6.81E+03	6.87E+03	-6.77E+03	6.85E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 135; Fn=0.0
ffk_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–536. Time history of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
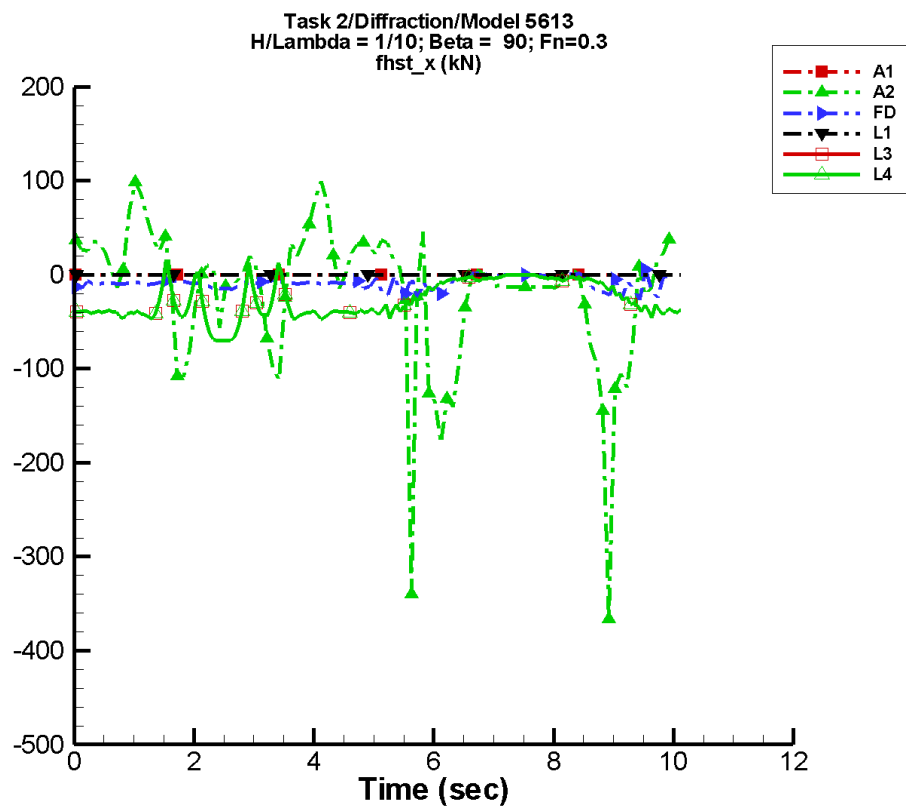
Table G–1071. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.74	1.07E+04	-96	12.1	-156
A2	84.7	1.47E+04	-107	752.	-21
FD	-51.5	1.35E+04	-107	755.	-18
L1	11.0	1.04E+04	-96	7.35	-101
L3	-0.451	1.11E+04	-104	462.	-13
L4	-0.451	1.11E+04	-104	462.	-13
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1072. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.07E+04	1.07E+04	-1.07E+04	1.06E+04
A2	-1.51E+04	1.58E+04	-1.50E+04	1.56E+04
FD	-1.39E+04	1.41E+04	-1.39E+04	1.39E+04
L1	-1.04E+04	1.04E+04	-1.04E+04	1.04E+04
L3	-1.16E+04	1.16E+04	-1.15E+04	1.15E+04
L4	-1.16E+04	1.16E+04	-1.15E+04	1.15E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–537. Time history of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
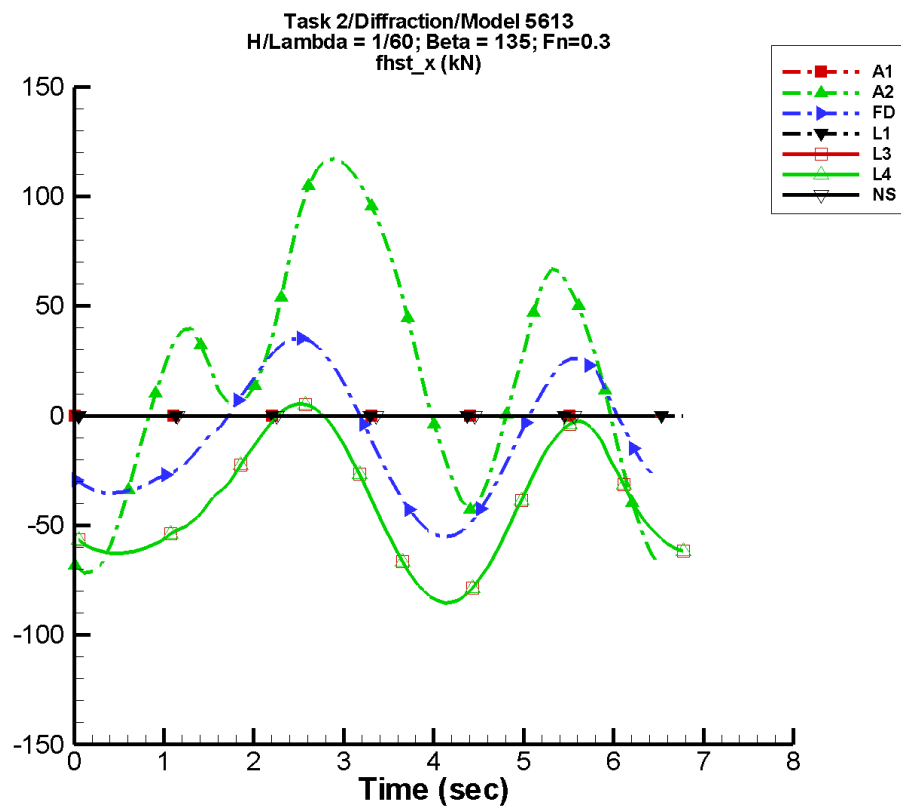
Table G–1073. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.21	1.42E+03	-99	1.66	-158
A2	5.07	1.41E+03	-102	167.	-56
FD	2.42	1.40E+03	-103	155.	-60
L1	1.02	1.40E+03	-99	1.23	-69
L3	2.54	1.38E+03	-99	149.	-56
L4	2.54	1.38E+03	-99	149.	-56
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1074. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

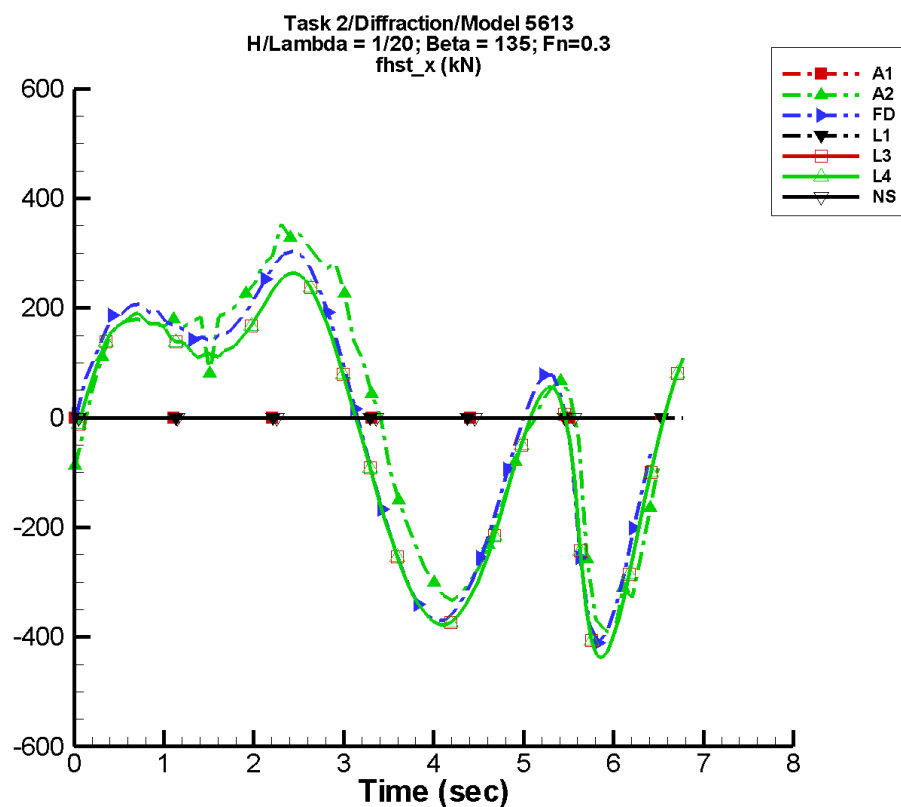| Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.42E+03	1.42E+03	-1.42E+03	1.40E+03
A2	-1.54E+03	1.34E+03	-1.53E+03	1.33E+03
FD	-1.53E+03	1.33E+03	-1.51E+03	1.32E+03
L1	-1.40E+03	1.40E+03	-1.40E+03	1.39E+03
L3	-1.52E+03	1.31E+03	-1.51E+03	1.31E+03
L4	-1.52E+03	1.31E+03	-1.51E+03	1.31E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–538. Time history of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
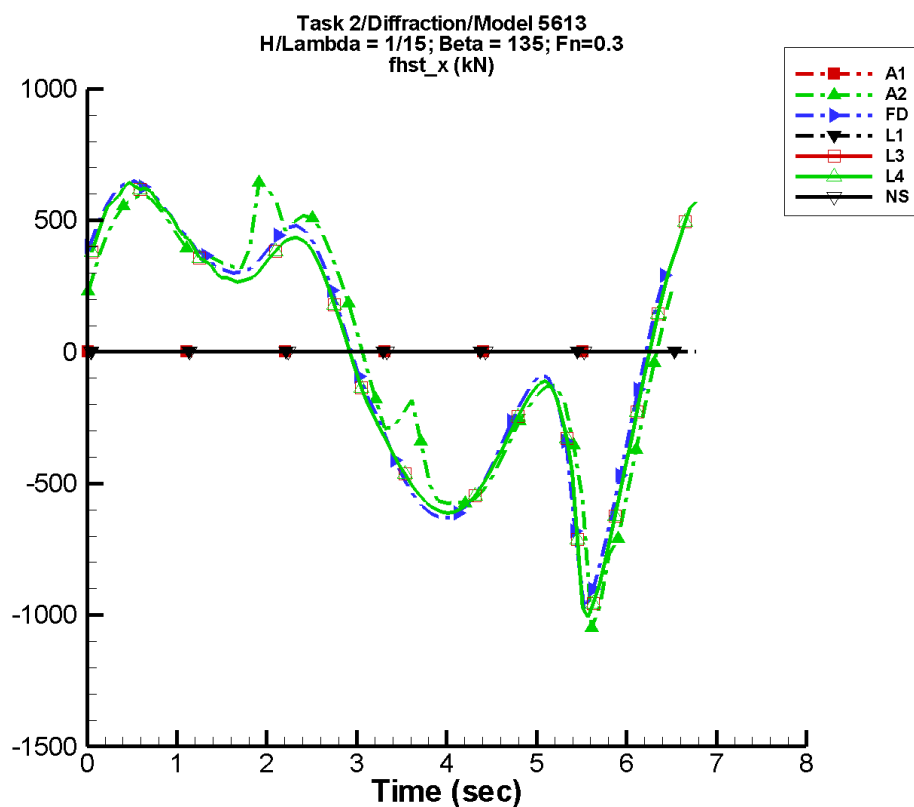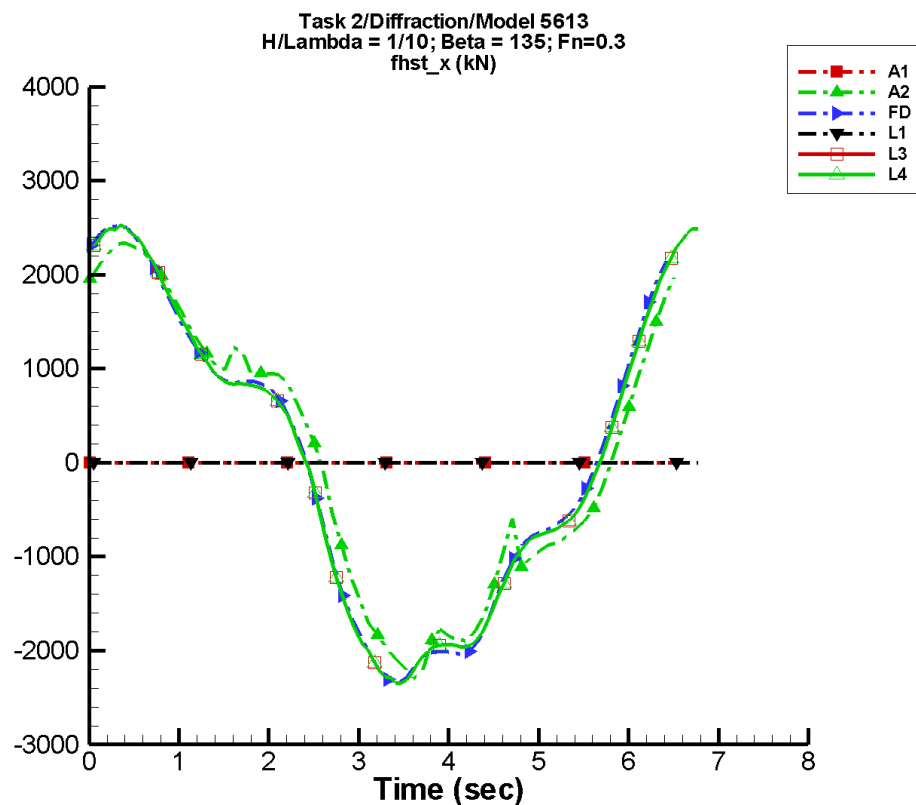
Table G–1075. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	3.64	4.27E+03	-99	4.99	-158
A2	57.8	4.05E+03	-107	1.17E+03	-45
FD	31.1	4.01E+03	-107	1.11E+03	-49
L1	3.06	4.19E+03	-99	3.68	-69
L3	27.3	3.67E+03	-103	998.	-42
L4	27.3	3.67E+03	-103	998.	-42
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1076. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-4.27E+03	4.27E+03	-4.28E+03	4.22E+03
A2	-5.43E+03	4.31E+03	-4.90E+03	4.23E+03
FD	-5.06E+03	4.18E+03	-4.83E+03	4.12E+03
L1	-4.20E+03	4.20E+03	-4.20E+03	4.18E+03
L3	-4.70E+03	3.79E+03	-4.60E+03	3.77E+03
L4	-4.70E+03	3.79E+03	-4.60E+03	3.77E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–539. Time history of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
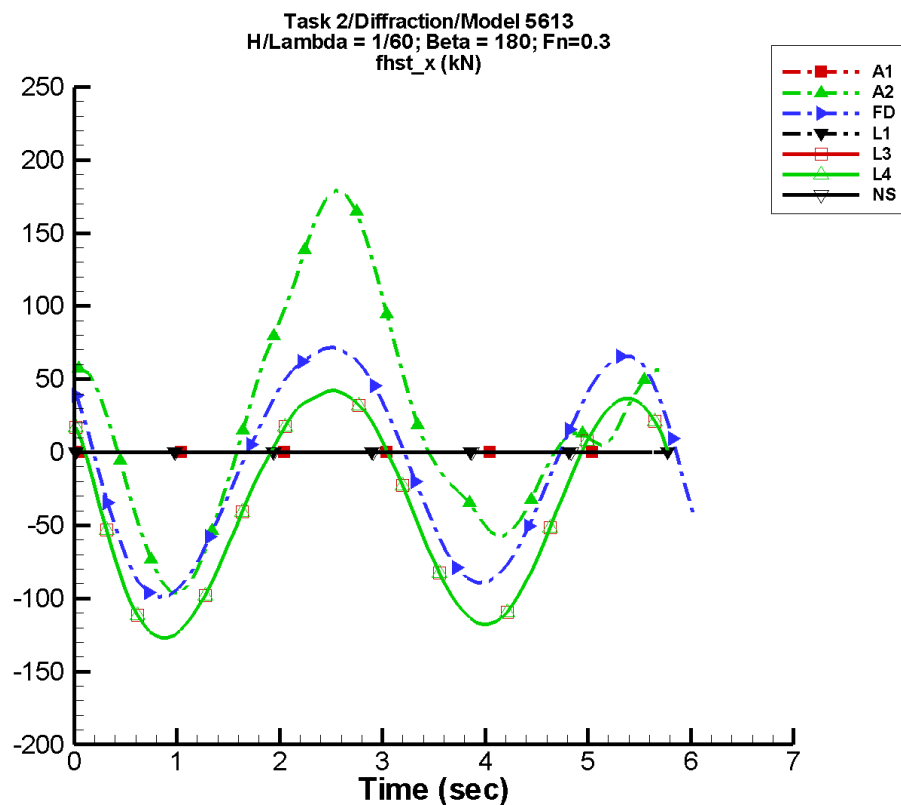
Table G–1077. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	4.85	5.70E+03	-99	6.66	-158
A2	114.	5.47E+03	-111	1.75E+03	-49
FD	39.5	5.31E+03	-111	1.69E+03	-51
L1	4.08	5.59E+03	-99	4.91	-69
L3	26.9	4.66E+03	-107	1.45E+03	-44
L4	26.9	4.66E+03	-107	1.45E+03	-44
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1078. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-5.70E+03	5.70E+03	-5.71E+03	5.64E+03
A2	-6.33E+03	6.23E+03	-6.22E+03	6.12E+03
FD	-6.24E+03	5.90E+03	-6.12E+03	5.80E+03
L1	-5.59E+03	5.59E+03	-5.60E+03	5.57E+03
L3	-5.48E+03	5.14E+03	-5.44E+03	5.11E+03
L4	-5.48E+03	5.14E+03	-5.44E+03	5.11E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–540. Time history of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
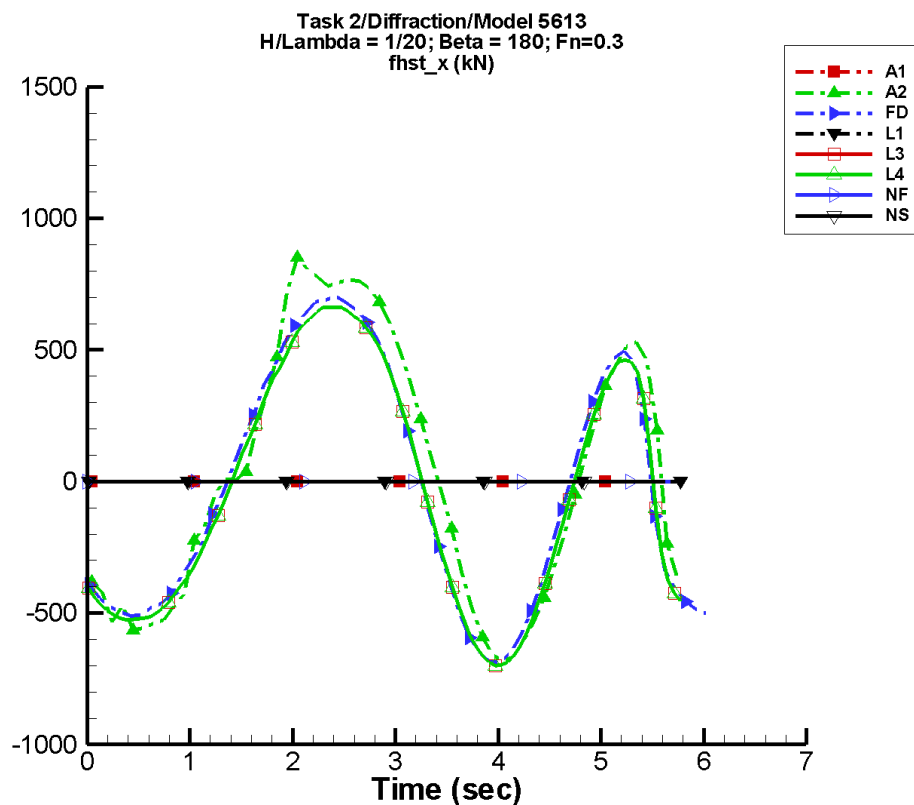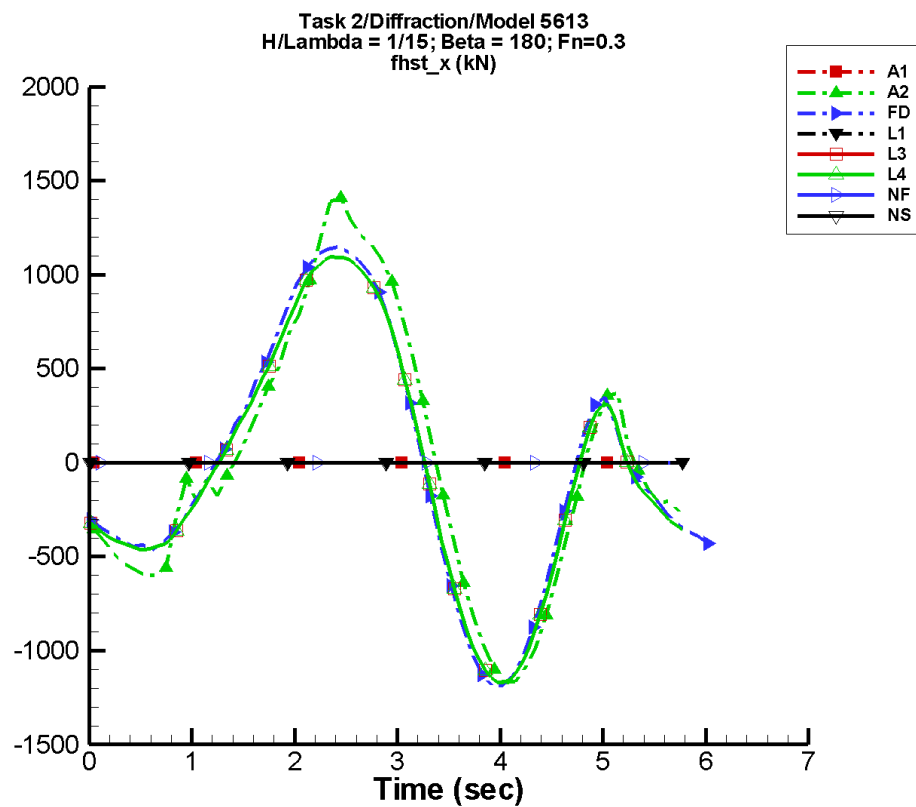
Table G–1079. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	7.28	8.55E+03	-99	9.99	-158
A2	296.	1.01E+04	-116	3.73E+03	-56
FD	51.4	9.22E+03	-114	3.12E+03	-55
L1	6.12	8.39E+03	-99	7.36	-69
L3	31.0	7.63E+03	-110	2.45E+03	-49
L4	31.0	7.63E+03	-110	2.45E+03	-49
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1080. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-8.55E+03	8.55E+03	-8.57E+03	8.46E+03
A2	-1.26E+04	1.22E+04	-1.22E+04	1.13E+04
FD	-1.13E+04	1.06E+04	-1.11E+04	1.04E+04
L1	-8.39E+03	8.39E+03	-8.40E+03	8.36E+03
L3	-9.38E+03	8.68E+03	-9.30E+03	8.63E+03
L4	-9.38E+03	8.68E+03	-9.30E+03	8.63E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–541. Time history of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
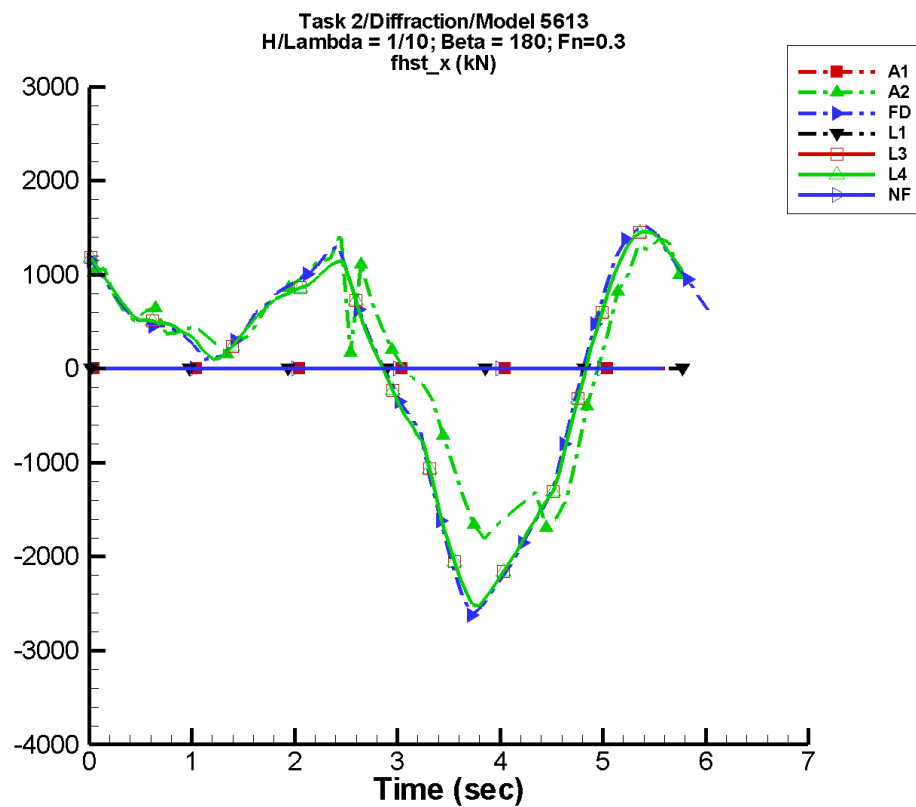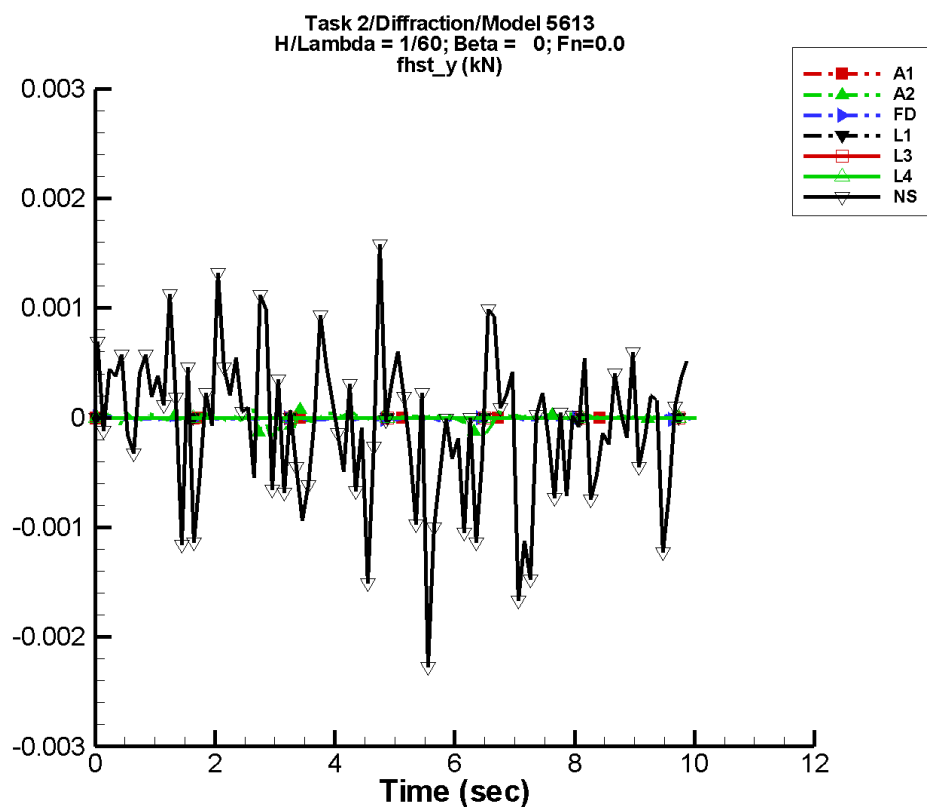
Table G–1081. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-3.31E-02	1.41E+03	93	4.89E-02	21
A2	3.33	1.41E+03	93	162.	-142
FD	2.55	1.40E+03	93	155.	-141
L1	-0.941	1.40E+03	94	1.26	146
L3	0.912	1.39E+03	95	151.	-133
L4	0.912	1.39E+03	95	151.	-133
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1082. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.41E+03	1.41E+03	-1.41E+03	1.41E+03
A2	-1.54E+03	1.34E+03	-1.54E+03	1.34E+03
FD	-1.53E+03	1.33E+03	-1.53E+03	1.33E+03
L1	-1.40E+03	1.40E+03	-1.40E+03	1.40E+03
L3	-1.52E+03	1.31E+03	-1.52E+03	1.31E+03
L4	-1.52E+03	1.31E+03	-1.52E+03	1.31E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta =   0; Fn=0.3
ffk_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–542. Time history of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1083. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-9.90E-02	4.25E+03	93	0.148	21
A2	58.1	4.09E+03	98	1.16E+03	-151
FD	23.9	4.03E+03	97	1.10E+03	-153
L1	-2.82	4.19E+03	94	3.77	146
L3	7.06	3.74E+03	98	1.04E+03	-150
L4	7.06	3.74E+03	98	1.04E+03	-150
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1084. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
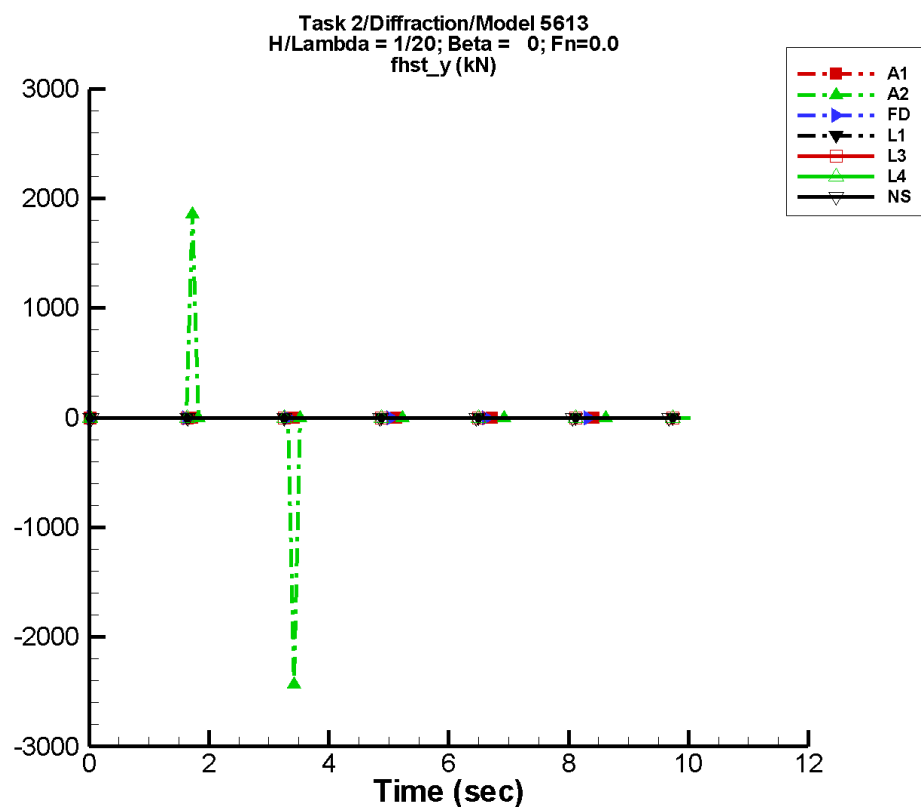
Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-4.25E+03	4.25E+03	-4.25E+03	4.25E+03
A2	-5.05E+03	4.31E+03	-5.04E+03	4.30E+03
FD	-5.06E+03	4.18E+03	-5.05E+03	4.17E+03
L1	-4.20E+03	4.20E+03	-4.19E+03	4.19E+03
L3	-4.70E+03	3.79E+03	-4.69E+03	3.79E+03
L4	-4.70E+03	3.79E+03	-4.69E+03	3.79E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–543. Time history of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
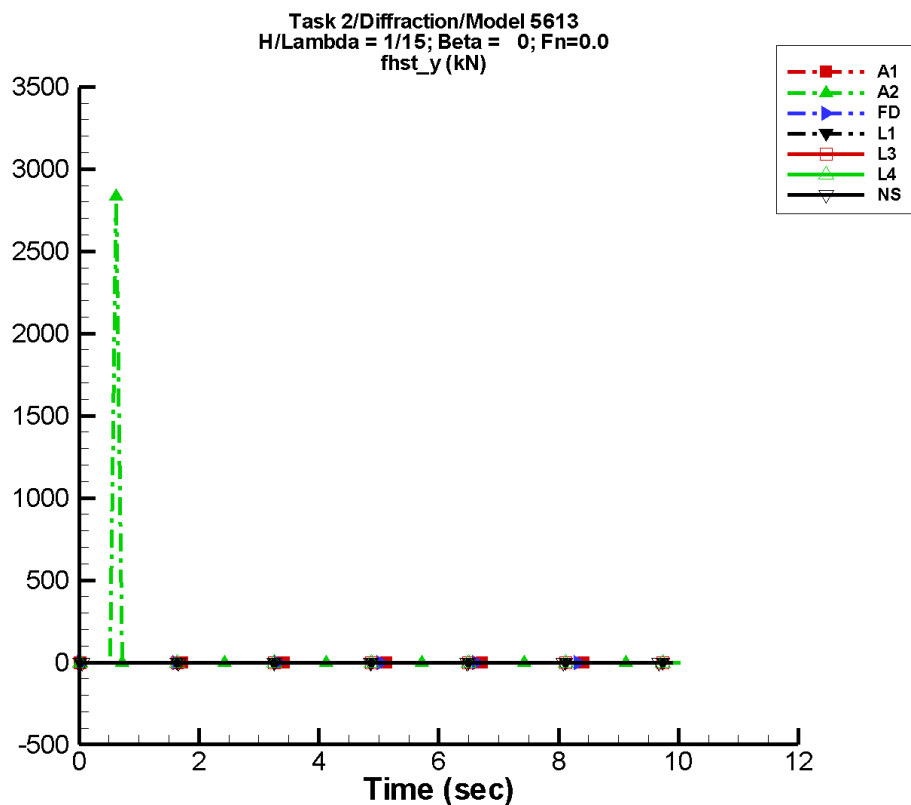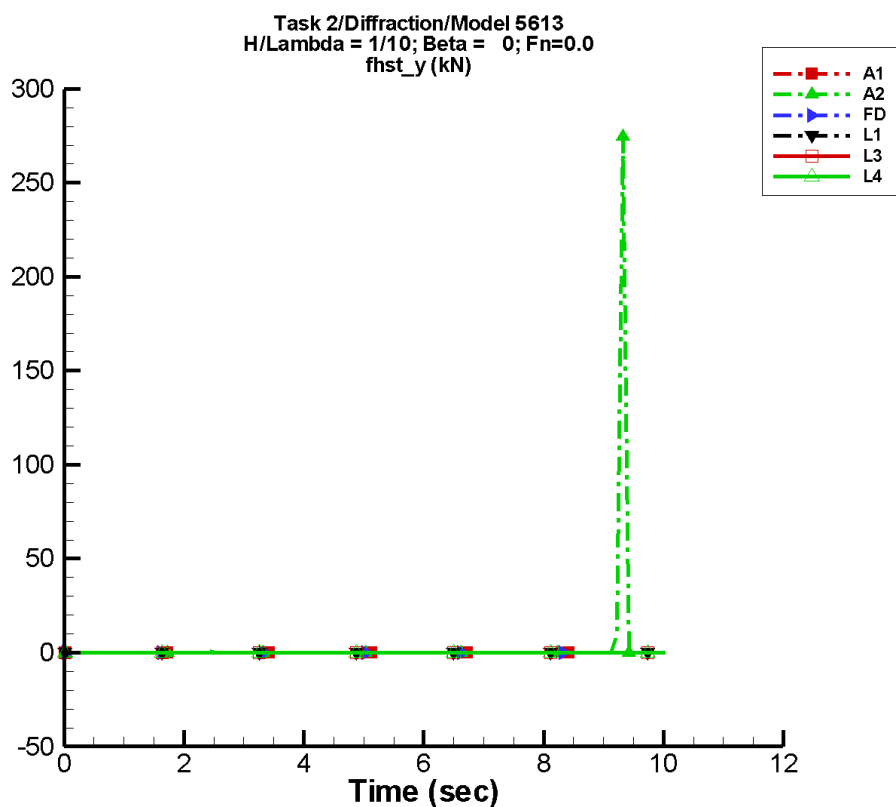
Table G–1085. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-0.132	5.67E+03	93	0.197	21
A2	112.	5.52E+03	102	1.77E+03	-147
FD	25.4	5.33E+03	101	1.66E+03	-150
L1	-3.77	5.59E+03	94	5.03	146
L3	-2.99	4.72E+03	102	1.47E+03	-148
L4	-2.99	4.72E+03	102	1.47E+03	-148
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1086. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-5.67E+03	5.67E+03	-5.67E+03	5.67E+03
A2	-6.38E+03	6.23E+03	-6.34E+03	6.23E+03
FD	-6.24E+03	5.90E+03	-6.23E+03	5.89E+03
L1	-5.59E+03	5.59E+03	-5.59E+03	5.59E+03
L3	-5.48E+03	5.14E+03	-5.47E+03	5.13E+03
L4	-5.48E+03	5.14E+03	-5.47E+03	5.13E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 0; Fn=0.3
ffk_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–544. Time history of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
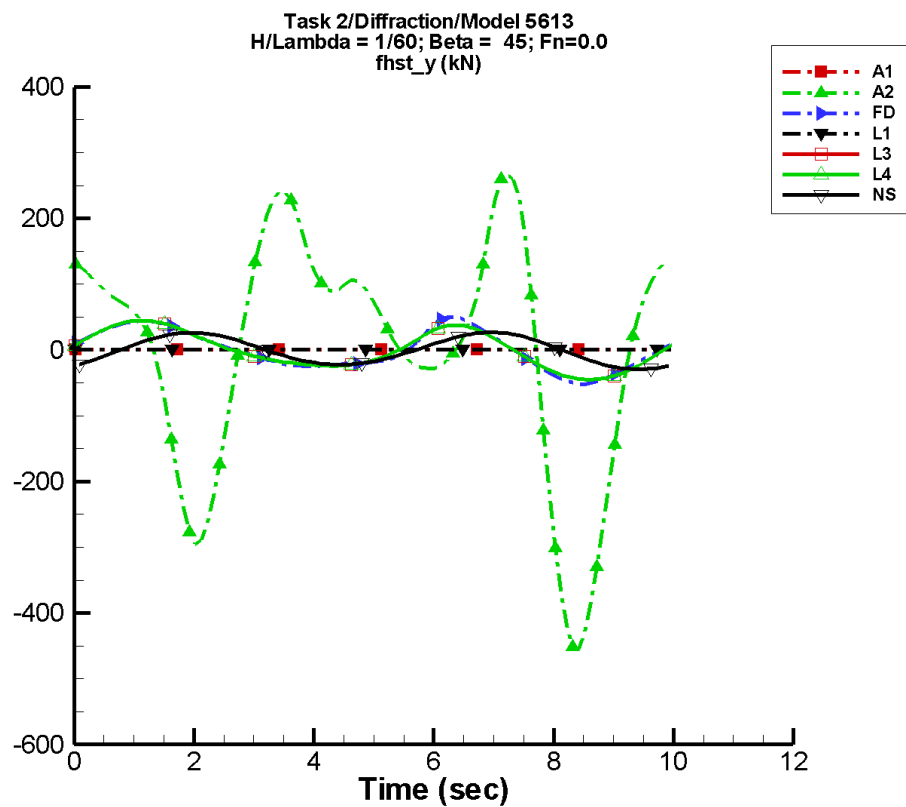
Table G–1087. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-0.198	8.51E+03	93	0.296	21
A2	299.	1.03E+04	106	3.79E+03	-141
FD	40.6	9.26E+03	104	3.08E+03	-145
L1	-5.65	8.39E+03	94	7.54	146
L3	-7.38	7.72E+03	105	2.51E+03	-142
L4	-7.38	7.72E+03	105	2.51E+03	-142
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1088. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-8.51E+03	8.51E+03	-8.51E+03	8.51E+03
A2	-1.27E+04	1.23E+04	-1.26E+04	1.21E+04
FD	-1.13E+04	1.06E+04	-1.13E+04	1.06E+04
L1	-8.39E+03	8.39E+03	-8.39E+03	8.39E+03
L3	-9.39E+03	8.68E+03	-9.38E+03	8.68E+03
L4	-9.39E+03	8.68E+03	-9.38E+03	8.68E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–545. Time history of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
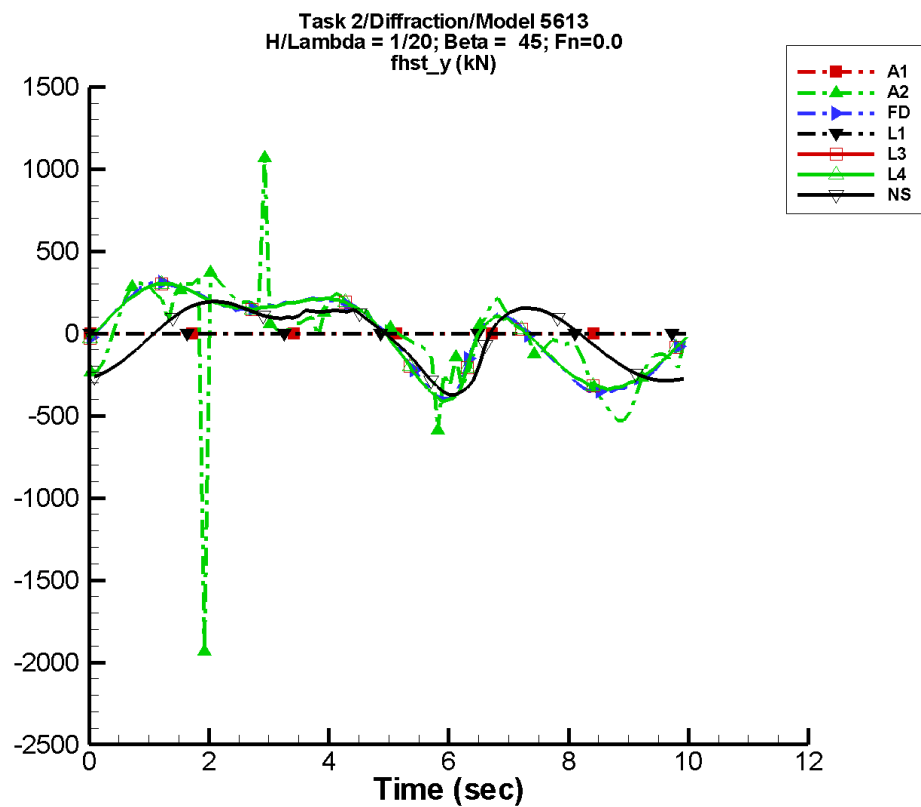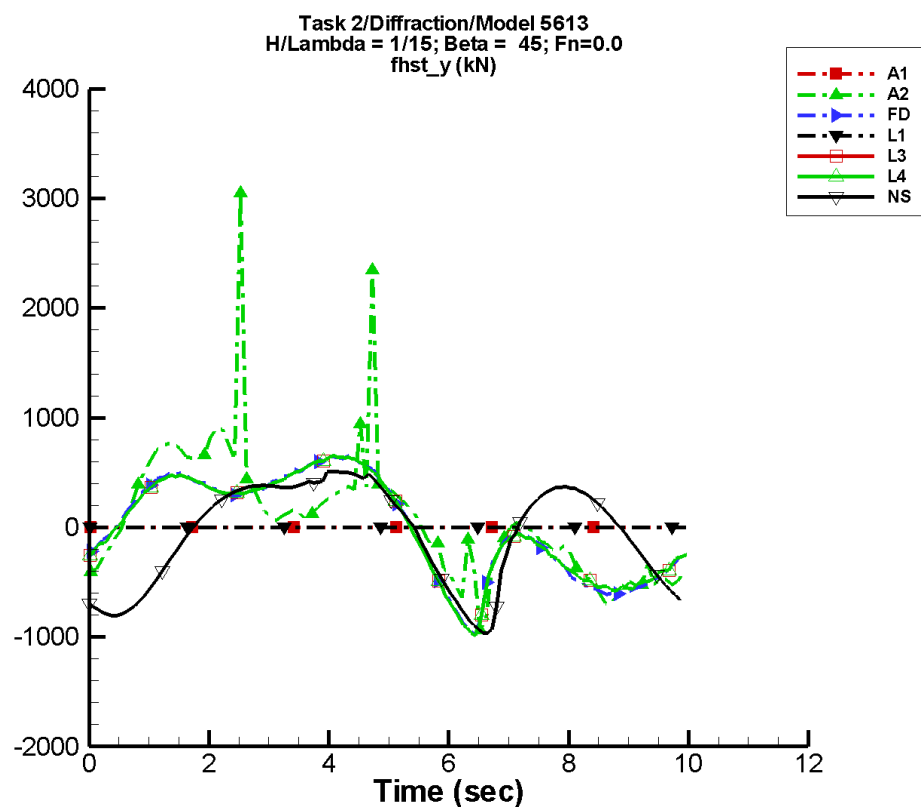
Table G–1089. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.424	1.75E+03	92	0.626	-157
A2	3.63	1.78E+03	91	82.2	-175
FD	1.15	1.76E+03	97	76.8	-168
L1	0.226	1.73E+03	93	0.349	-168
L3	1.12	1.73E+03	94	85.4	-172
L4	1.12	1.73E+03	94	85.4	-172
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1090. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.75E+03	1.75E+03	-1.74E+03	1.75E+03
A2	-1.77E+03	1.78E+03	-1.77E+03	1.78E+03
FD	-1.74E+03	1.77E+03	-1.74E+03	1.76E+03
L1	-1.73E+03	1.73E+03	-1.73E+03	1.73E+03
L3	-1.72E+03	1.73E+03	-1.72E+03	1.73E+03
L4	-1.72E+03	1.73E+03	-1.72E+03	1.73E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–546. Time history of F_x^{ffk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
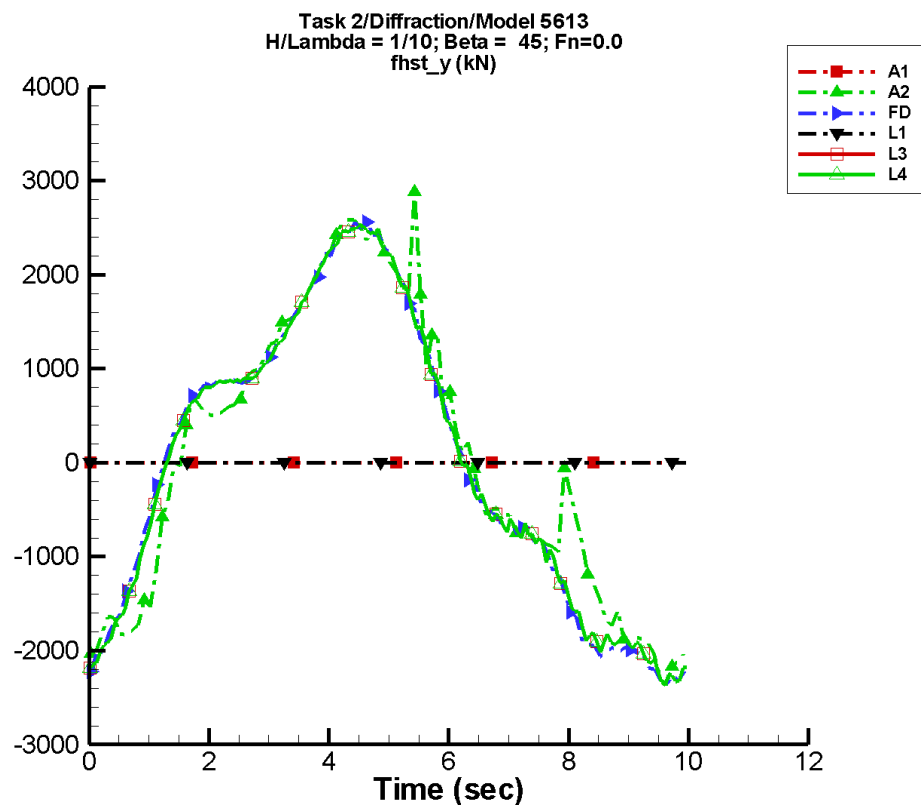
Table G–1091. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.28	5.25E+03	92	1.88	-157
A2	55.5	5.59E+03	94	369.	170
FD	3.73	5.45E+03	101	365.	-174
L1	0.679	5.20E+03	93	1.05	-168
L3	-0.131	4.99E+03	97	353.	-179
L4	-0.131	4.99E+03	97	353.	-179
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1092. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-5.25E+03	5.25E+03	-5.24E+03	5.26E+03
A2	-5.49E+03	5.90E+03	-5.47E+03	5.89E+03
FD	-5.40E+03	5.69E+03	-5.38E+03	5.68E+03
L1	-5.20E+03	5.20E+03	-5.19E+03	5.20E+03
L3	-4.92E+03	5.16E+03	-4.92E+03	5.16E+03
L4	-4.92E+03	5.16E+03	-4.92E+03	5.16E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–547. Time history of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
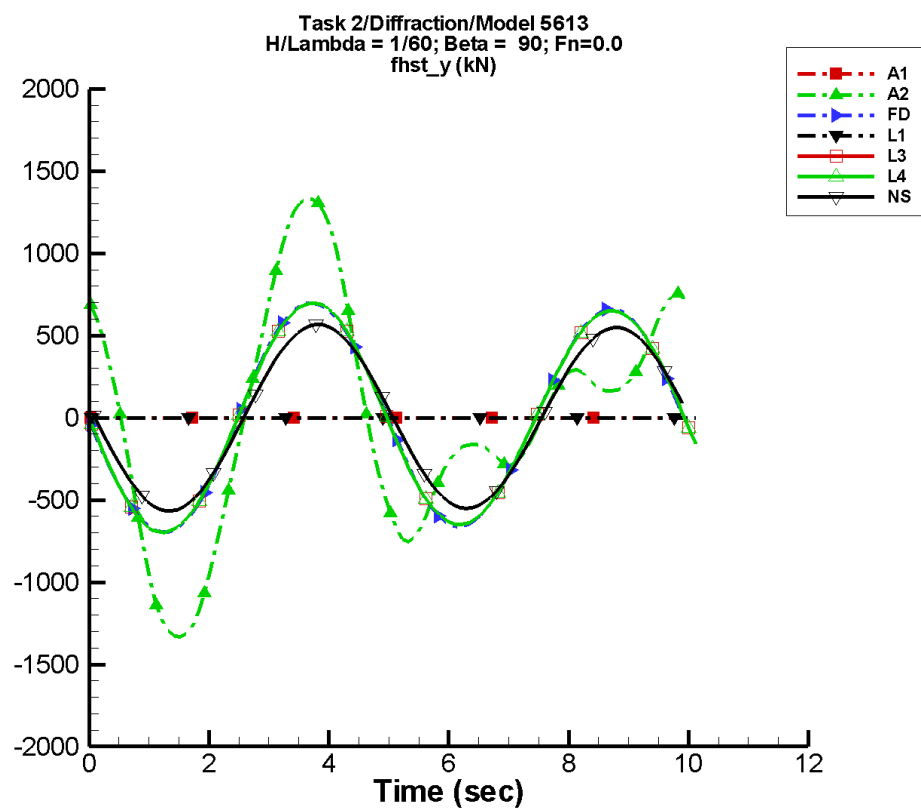
Table G–1093. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.70	7.01E+03	92	2.52	-157
A2	90.8	7.88E+03	97	460.	169
FD	8.23	7.52E+03	103	410.	-167
L1	0.905	6.93E+03	93	1.40	-168
L3	-6.30	6.62E+03	99	345.	-172
L4	-6.30	6.62E+03	99	345.	-172
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1094. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

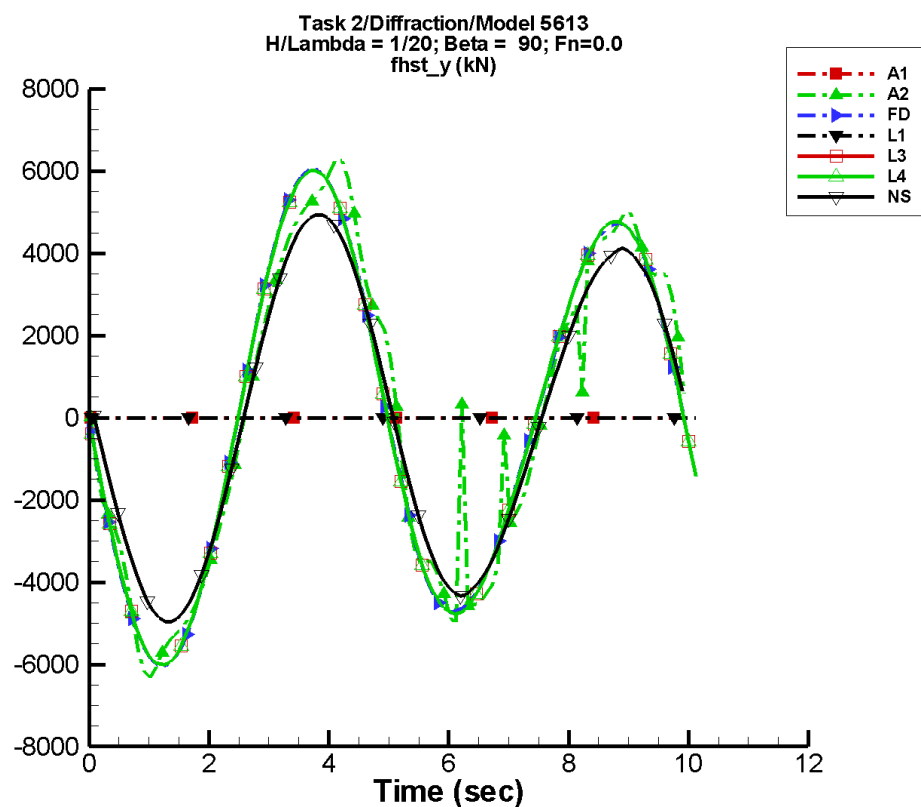| Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-7.01E+03	7.01E+03	-7.00E+03	7.02E+03
A2	-7.92E+03	8.45E+03	-7.90E+03	8.44E+03
FD	-7.72E+03	7.93E+03	-7.70E+03	7.91E+03
L1	-6.93E+03	6.93E+03	-6.93E+03	6.93E+03
L3	-6.81E+03	6.87E+03	-6.80E+03	6.87E+03
L4	-6.81E+03	6.87E+03	-6.80E+03	6.87E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 45; Fn=0.3
ffk_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–548. Time history of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
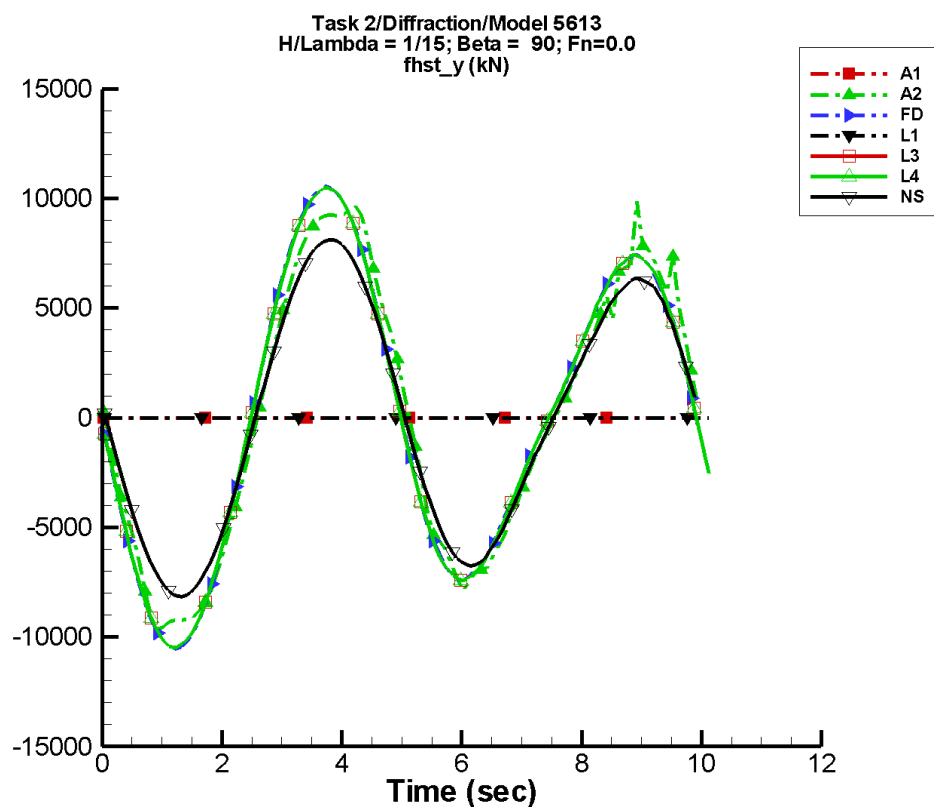
Table G–1095. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	2.56	1.05E+04	92	3.77	-157
A2	108.	1.45E+04	99	890.	172
FD	26.1	1.34E+04	105	780.	-166
L1	1.36	1.04E+04	93	2.09	-168
L3	-17.2	1.11E+04	101	530.	-175
L4	-17.2	1.11E+04	101	530.	-175
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1096. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.05E+04	1.05E+04	-1.05E+04	1.05E+04
A2	-1.51E+04	1.58E+04	-1.51E+04	1.56E+04
FD	-1.39E+04	1.42E+04	-1.39E+04	1.41E+04
L1	-1.04E+04	1.04E+04	-1.04E+04	1.04E+04
L3	-1.16E+04	1.16E+04	-1.15E+04	1.15E+04
L4	-1.16E+04	1.16E+04	-1.15E+04	1.15E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–549. Time history of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
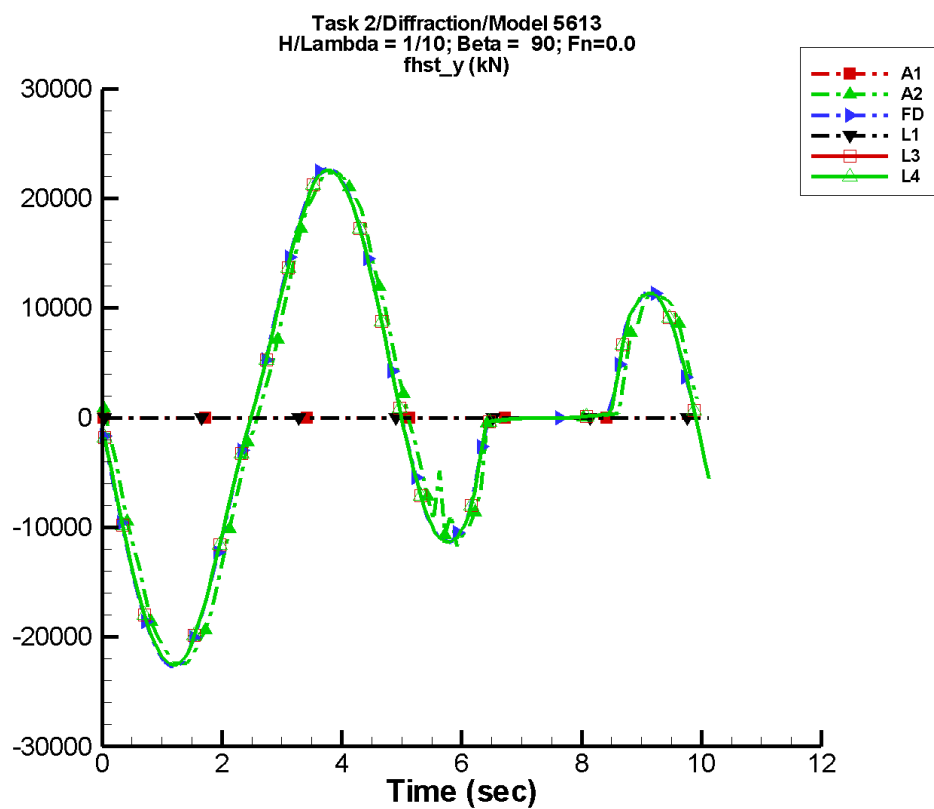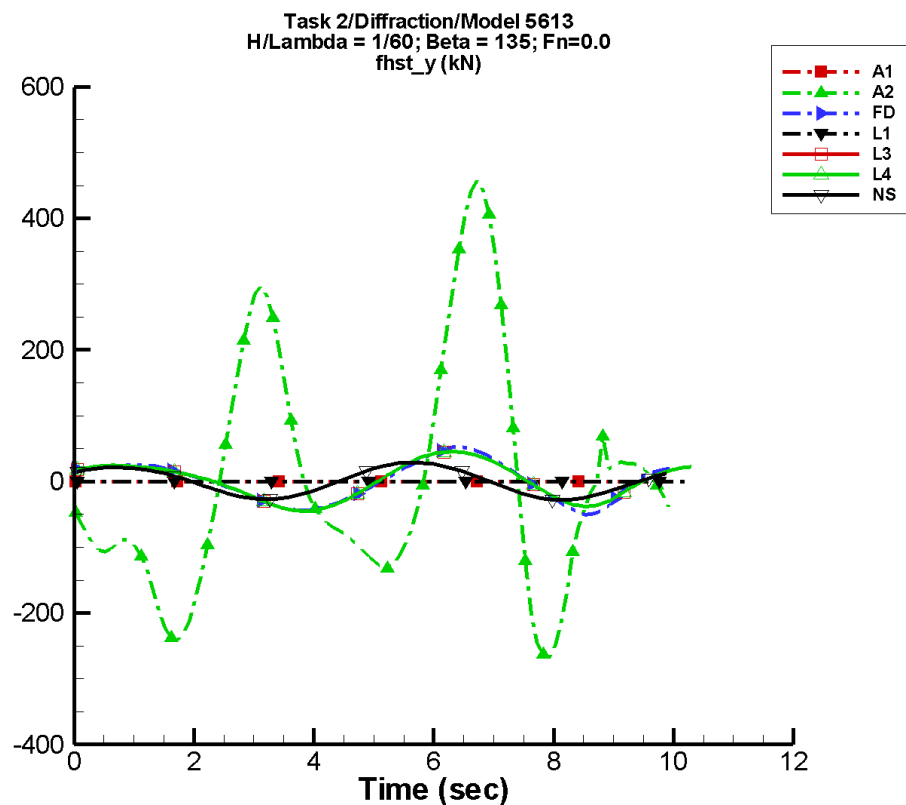
Table G–1097. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	2.90E-02	45.8	176	4.39E-02	155
A2	2.82	30.2	-8	0.754	-94
FD	1.27	1.30	172	0.686	-106
L1	8.18E-03	19.8	176	1.30E-02	143
L3	0.673	11.3	176	0.497	-98
L4	0.673	11.3	176	0.497	-98
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1098. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-45.8	45.8	-45.3	45.3
A2	-27.0	33.5	-26.8	33.2
FD	0.131	3.28	0.237	3.20
L1	-19.8	19.8	-19.7	19.7
L3	-10.3	12.5	-10.3	12.4
L4	-10.3	12.5	-10.3	12.4
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–550. Time history of F_x^{ffk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1099. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
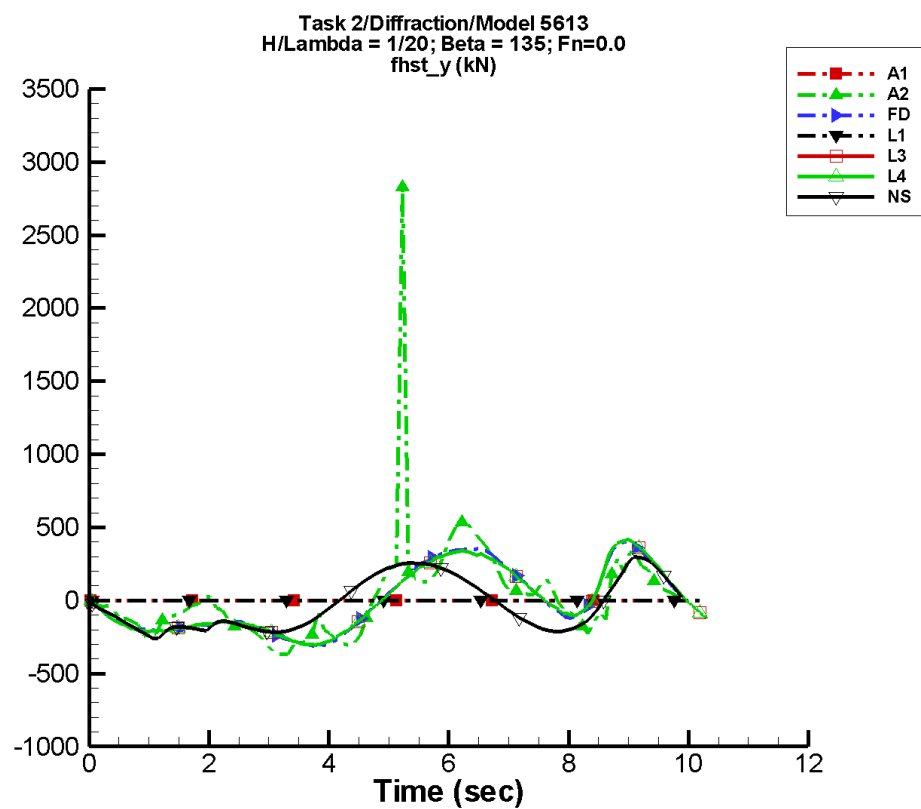
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.71E-02	138.	176	0.132	155
A2	50.5	100.	-7	64.8	-110
FD	5.39	6.81	171	3.96	-108
L1	2.46E-02	59.3	176	3.90E-02	143
L3	-1.25	24.8	177	2.29	88
L4	-1.25	24.8	177	2.29	88
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1100. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(kN)	(kN)	(kN)	(kN)
A1	-138.	138.	-136.	136.
A2	-405.	228.	-72.2	209.
FD	-0.781	18.6	0.650	17.9
L1	-59.3	59.3	-59.1	59.1
L3	-26.9	20.3	-26.4	18.8
L4	-26.9	20.3	-26.4	18.8
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–551. Time history of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
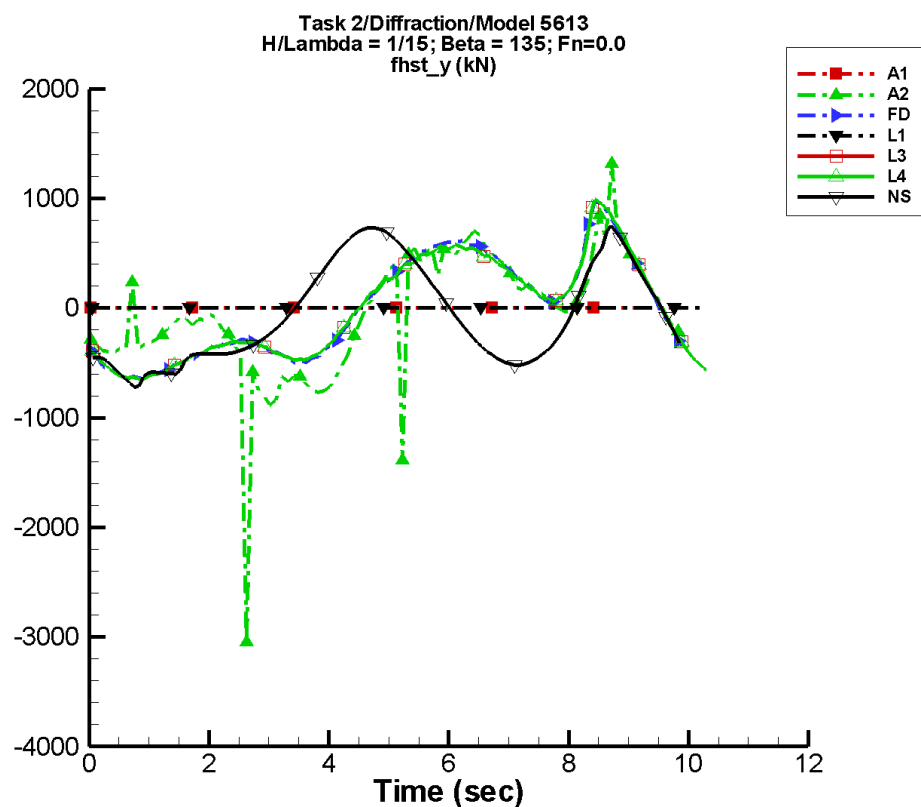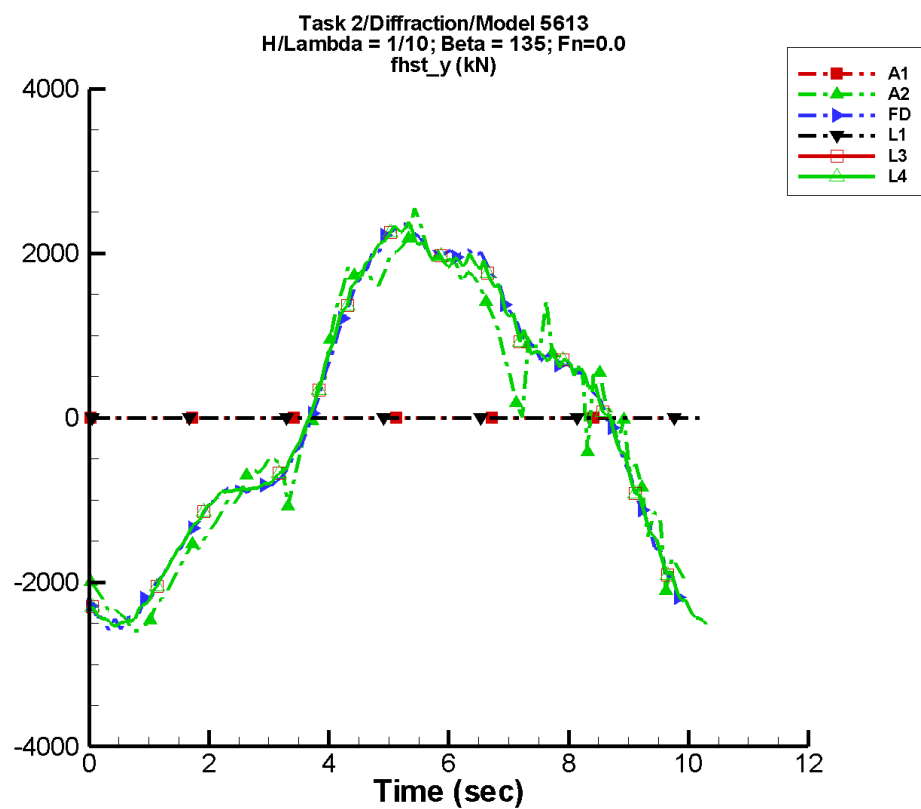
Table G–1101. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.116	184.	176	0.176	155
A2	112.	117.	-8	111.	-105
FD	6.81	8.19	173	4.20	-104
L1	3.27E-02	79.1	176	5.21E-02	143
L3	-5.15	25.2	178	6.55	86
L4	-5.15	25.2	178	6.55	86
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1102. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-184.	184.	-182.	182.
A2	-61.7	340.	-18.1	338.
FD	-4.21	20.2	0.859	18.0
L1	-79.1	79.1	-78.8	78.8
L3	-35.7	20.2	-34.9	18.9
L4	-35.7	20.2	-34.9	18.9
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.3
ffk_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–552. Time history of F_x^{ffk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
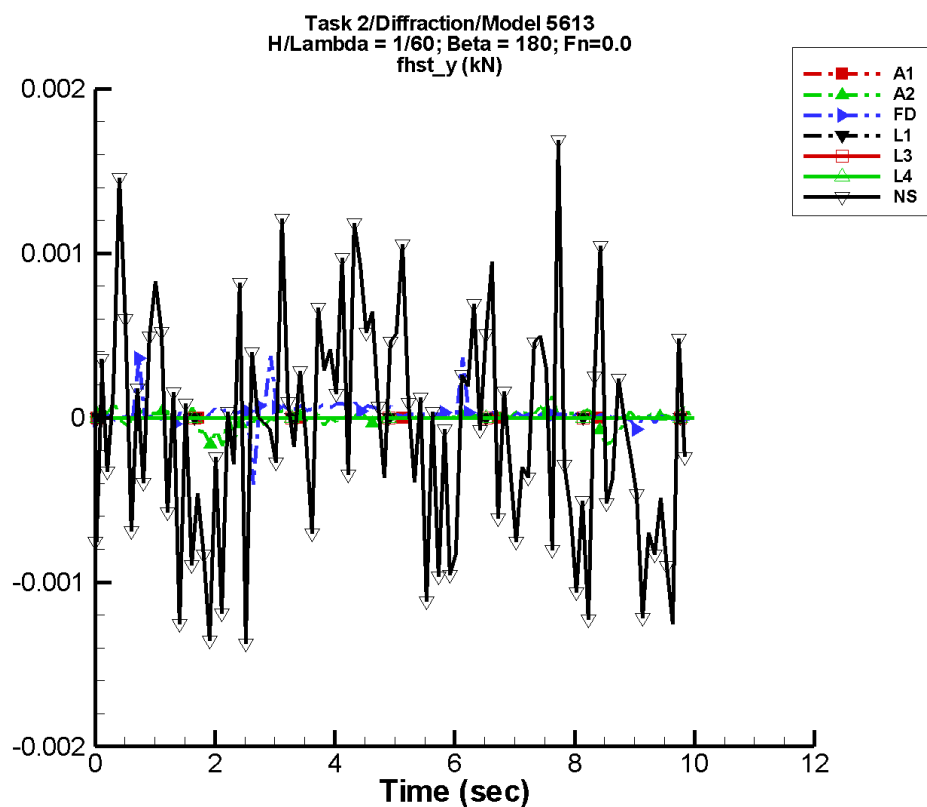
Table G–1103. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.174	276.	176	0.264	155
A2	171.	250.	-8	123.	-107
FD	3.67	0.753	-147	1.46	52
L1	4.91E-02	119.	176	7.81E-02	143
L3	-14.5	31.2	178	12.3	89
L4	-14.5	31.2	178	12.3	89
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1104. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
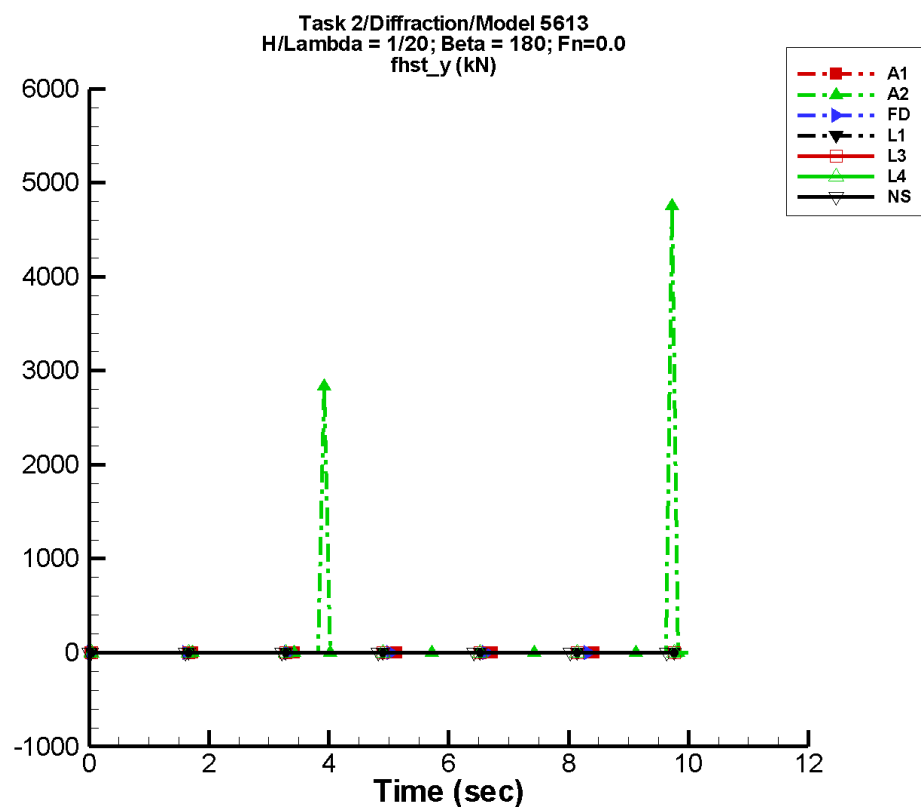
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-276.	276.	-273.	273.
A2	-79.7	618.	-6.44	559.
FD	-11.4	21.8	-0.617	11.7
L1	-119.	119.	-118.	118.
L3	-102.	22.4	-64.2	17.9
L4	-102.	22.4	-64.2	17.9
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.3
ffk_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–553. Time history of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
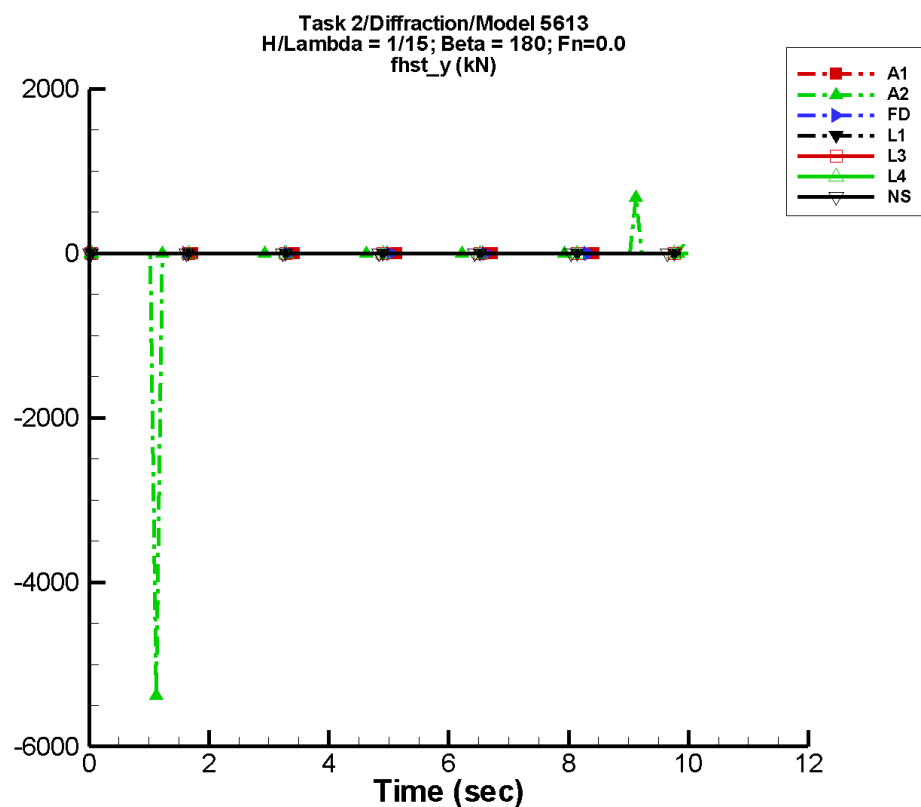
Table G–1105. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.666	1.75E+03	-94	1.02	180
A2	3.68	1.78E+03	-99	79.2	-20
FD	0.696	1.76E+03	-91	76.0	3
L1	8.69E-02	1.73E+03	-96	0.140	117
L3	1.17	1.73E+03	-96	82.4	-11
L4	1.17	1.73E+03	-96	82.4	-11
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1106. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.75E+03	1.74E+03	-1.75E+03	1.70E+03
A2	-1.77E+03	1.78E+03	-1.78E+03	1.74E+03
FD	-1.74E+03	1.76E+03	-1.72E+03	1.72E+03
L1	-1.73E+03	1.73E+03	-1.74E+03	1.72E+03
L3	-1.72E+03	1.73E+03	-1.72E+03	1.72E+03
L4	-1.72E+03	1.73E+03	-1.72E+03	1.72E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 135; Fn=0.3
ffk_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–554. Time history of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
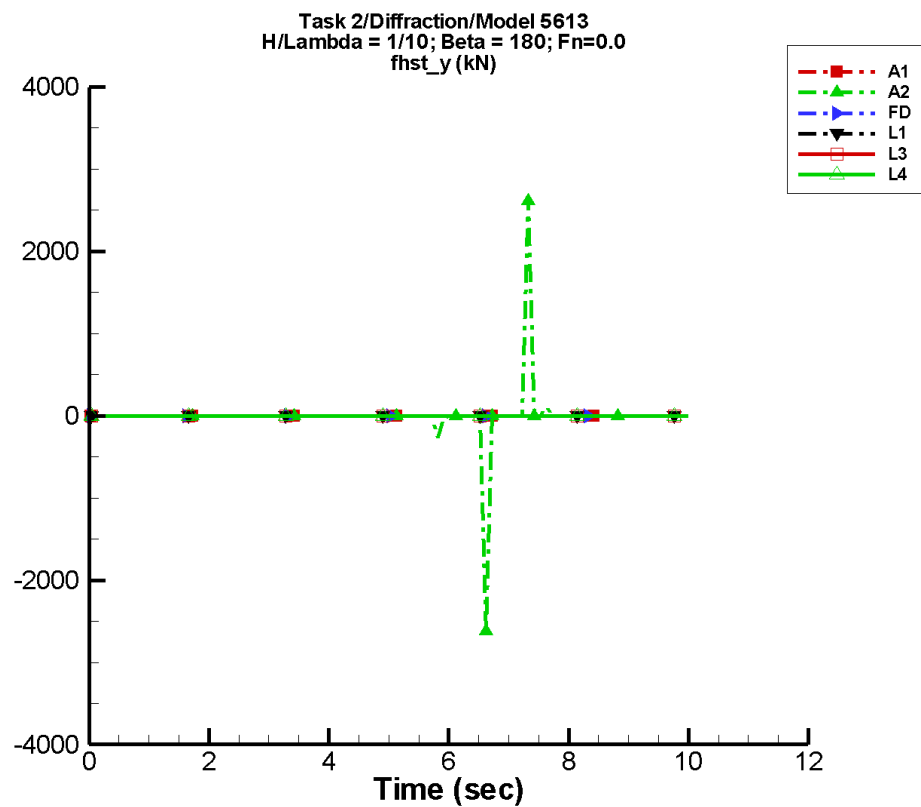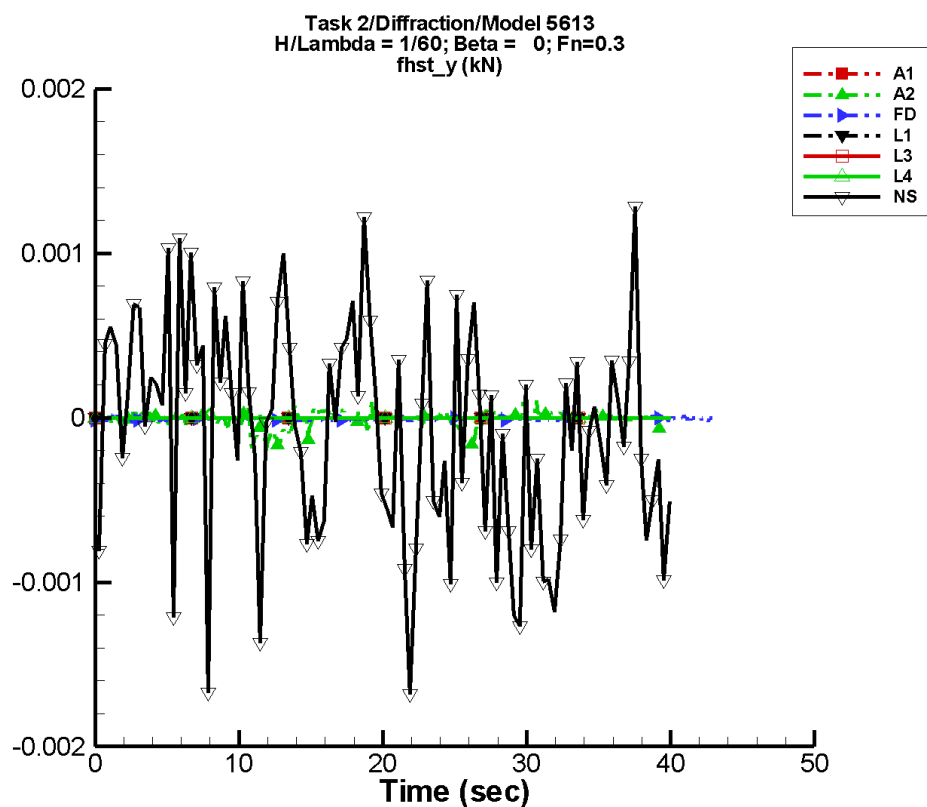
Table G–1107. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	2.00	5.25E+03	-94	3.07	180
A2	53.9	5.64E+03	-103	331.	-7
FD	-8.47	5.49E+03	-94	336.	12
L1	0.262	5.20E+03	-96	0.419	117
L3	-4.68	5.03E+03	-99	316.	-5
L4	-4.68	5.03E+03	-99	316.	-5
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1108. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-5.25E+03	5.25E+03	-5.26E+03	5.12E+03
A2	-5.49E+03	5.90E+03	-5.48E+03	5.74E+03
FD	-5.40E+03	5.69E+03	-5.39E+03	5.53E+03
L1	-5.20E+03	5.20E+03	-5.23E+03	5.15E+03
L3	-4.92E+03	5.16E+03	-4.96E+03	5.11E+03
L4	-4.92E+03	5.16E+03	-4.96E+03	5.11E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.3
ffk_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–555. Time history of F_x^{ffk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1109. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
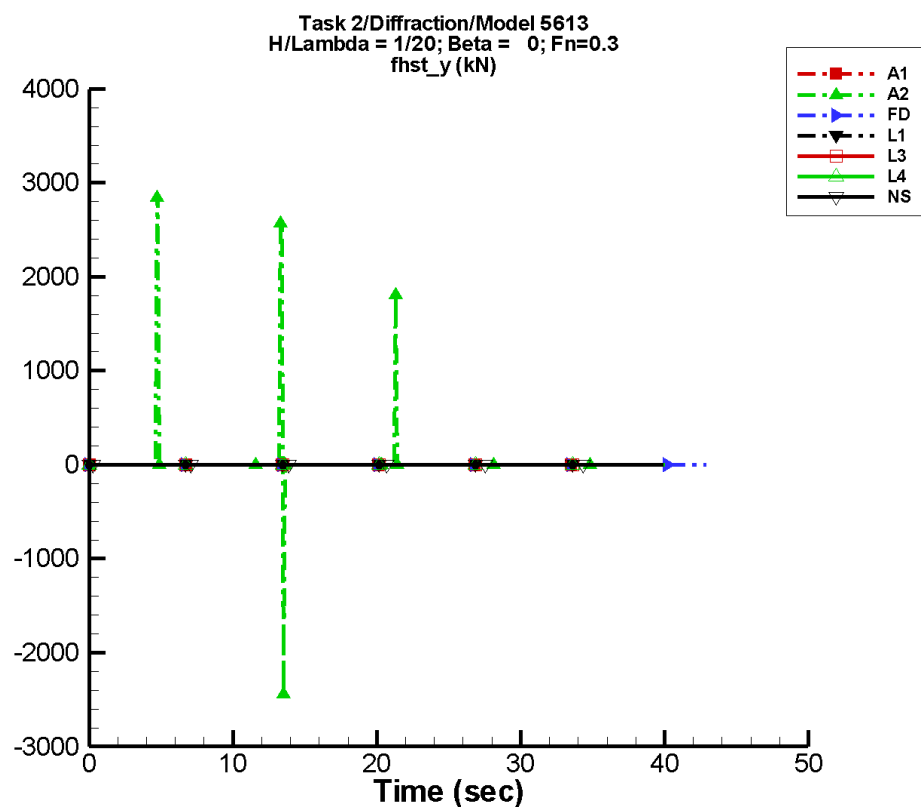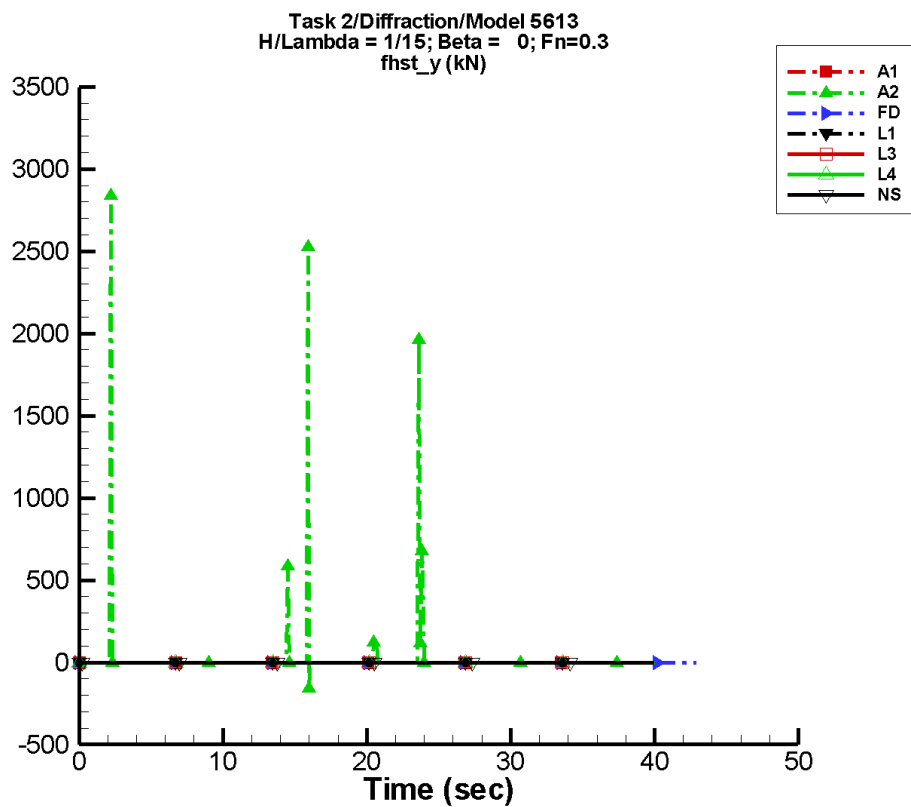
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	2.67	7.01E+03	-94	4.10	180
A2	97.5	7.96E+03	-105	381.	-11
FD	-13.9	7.60E+03	-96	339.	2
L1	0.349	6.93E+03	-96	0.559	117
L3	-16.6	6.67E+03	-101	302.	-18
L4	-16.6	6.67E+03	-101	302.	-18
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1110. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-7.01E+03	7.00E+03	-7.02E+03	6.84E+03
A2	-7.91E+03	8.45E+03	-7.85E+03	8.25E+03
FD	-7.72E+03	7.93E+03	-7.71E+03	7.70E+03
L1	-6.93E+03	6.93E+03	-6.98E+03	6.87E+03
L3	-6.81E+03	6.87E+03	-6.82E+03	6.81E+03
L4	-6.81E+03	6.87E+03	-6.82E+03	6.81E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–556. Time history of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
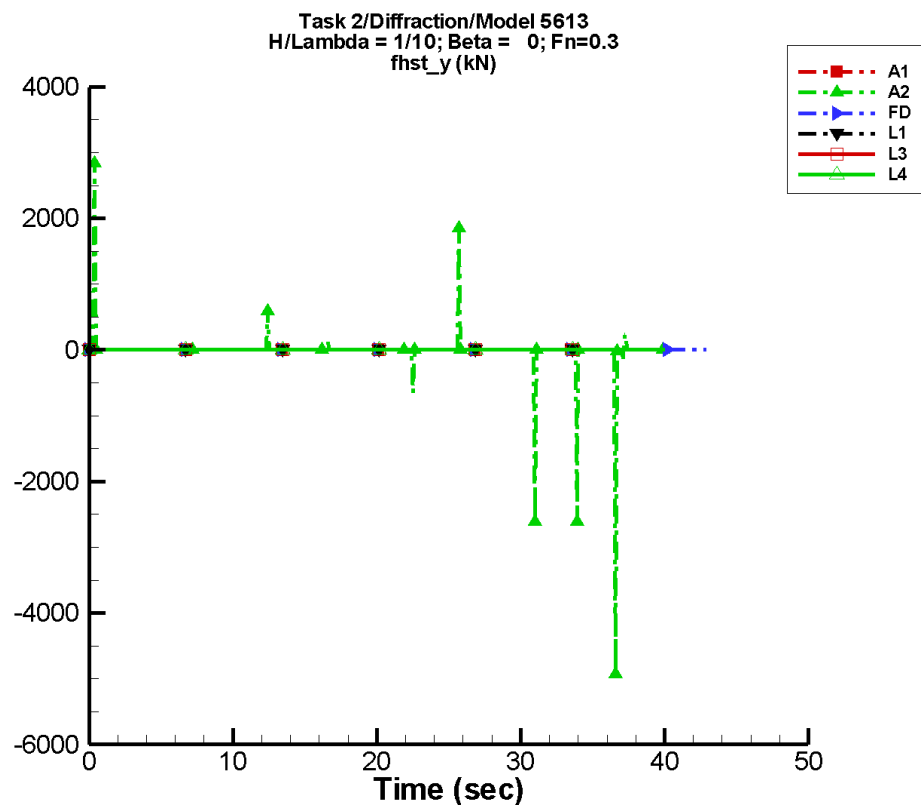
Table G–1111. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	4.01	1.05E+04	-94	6.15	180
A2	134.	1.47E+04	-107	831.	-26
FD	-20.9	1.35E+04	-98	640.	-8
L1	0.524	1.04E+04	-96	0.838	117
L3	-49.1	1.11E+04	-104	542.	-24
L4	-49.1	1.11E+04	-104	542.	-24
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1112. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.05E+04	1.05E+04	-1.05E+04	1.03E+04
A2	-1.51E+04	1.58E+04	-1.49E+04	1.53E+04
FD	-1.39E+04	1.41E+04	-1.39E+04	1.37E+04
L1	-1.04E+04	1.04E+04	-1.05E+04	1.03E+04
L3	-1.16E+04	1.15E+04	-1.16E+04	1.14E+04
L4	-1.16E+04	1.15E+04	-1.16E+04	1.14E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–557. Time history of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
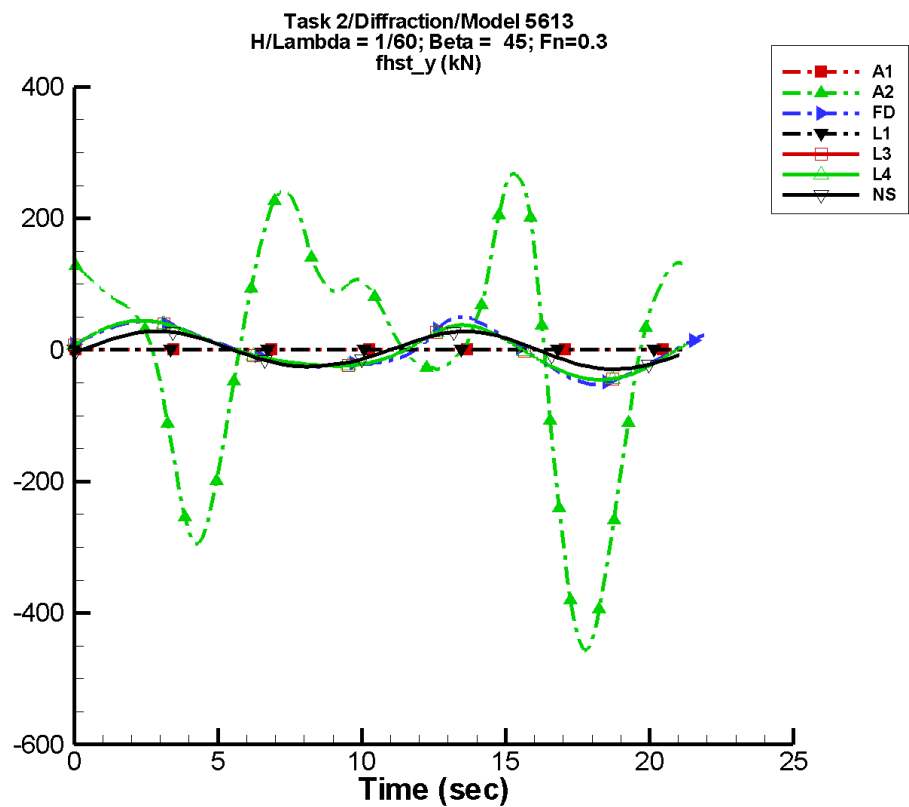
Table G–1113. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.13	1.41E+03	-101	1.77	153
A2	4.06	1.41E+03	-108	166.	-68
FD	3.11	1.40E+03	-132	158.	-118
L1	2.43	1.40E+03	-110	2.16	-118
L3	4.33	1.38E+03	-111	149.	-80
L4	4.33	1.38E+03	-111	149.	-80
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1114. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.41E+03	1.41E+03	-1.42E+03	1.37E+03
A2	-1.54E+03	1.34E+03	-1.52E+03	1.31E+03
FD	-1.53E+03	1.33E+03	-1.47E+03	1.30E+03
L1	-1.40E+03	1.40E+03	-1.40E+03	1.38E+03
L3	-1.52E+03	1.31E+03	-1.50E+03	1.30E+03
L4	-1.52E+03	1.31E+03	-1.50E+03	1.30E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–558. Time history of F_x^{ffk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
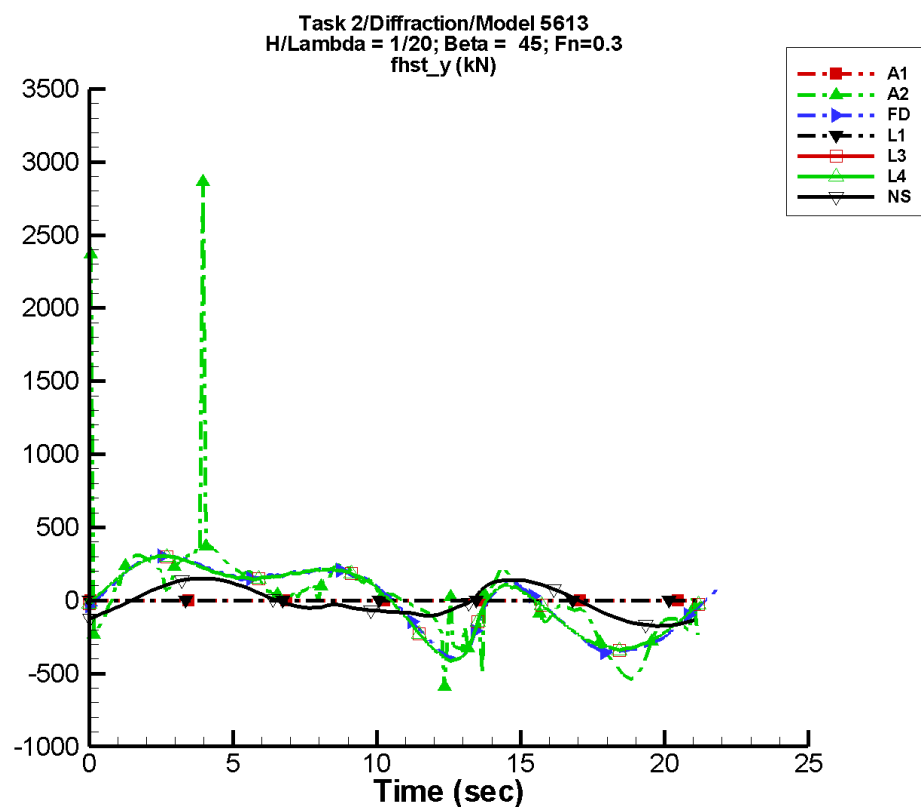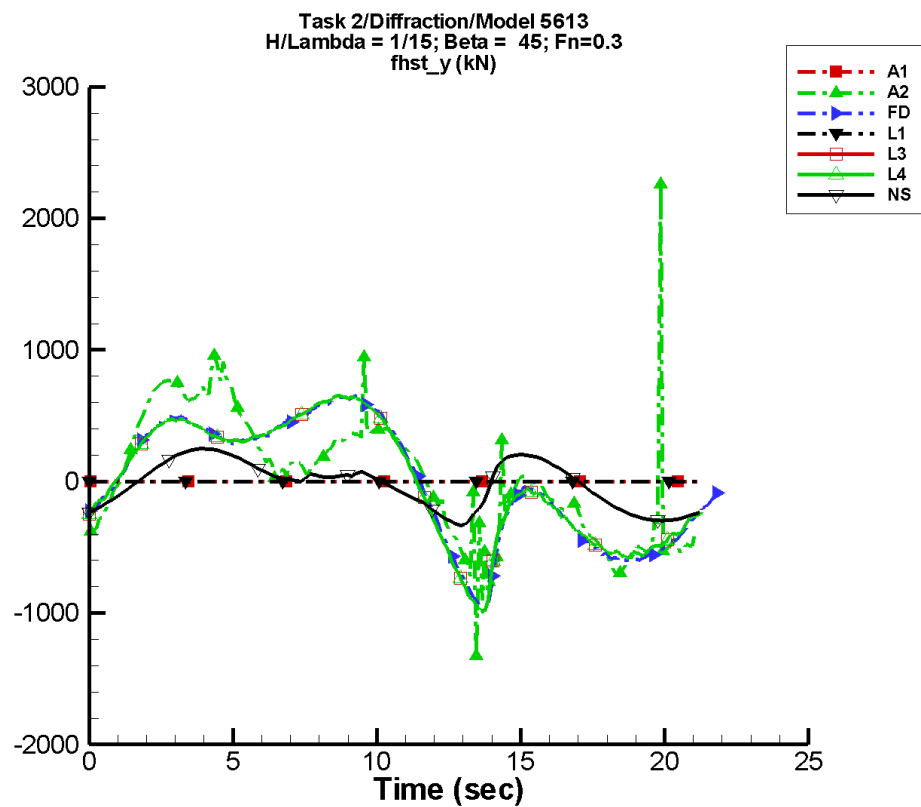
Table G–1115. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	3.40	4.25E+03	-101	5.32	153
A2	56.1	4.04E+03	-113	1.15E+03	-57
FD	29.6	4.00E+03	-135	1.15E+03	-104
L1	7.30	4.19E+03	-110	6.49	-118
L3	25.6	3.67E+03	-115	1.01E+03	-64
L4	25.6	3.67E+03	-115	1.01E+03	-64
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1116. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-4.25E+03	4.25E+03	-4.26E+03	4.11E+03
A2	-5.05E+03	4.31E+03	-4.57E+03	4.09E+03
FD	-5.04E+03	4.17E+03	-4.55E+03	4.00E+03
L1	-4.20E+03	4.19E+03	-4.19E+03	4.15E+03
L3	-4.69E+03	3.79E+03	-4.45E+03	3.73E+03
L4	-4.69E+03	3.79E+03	-4.45E+03	3.73E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 180; Fn=0.3
ffk_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–559. Time history of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
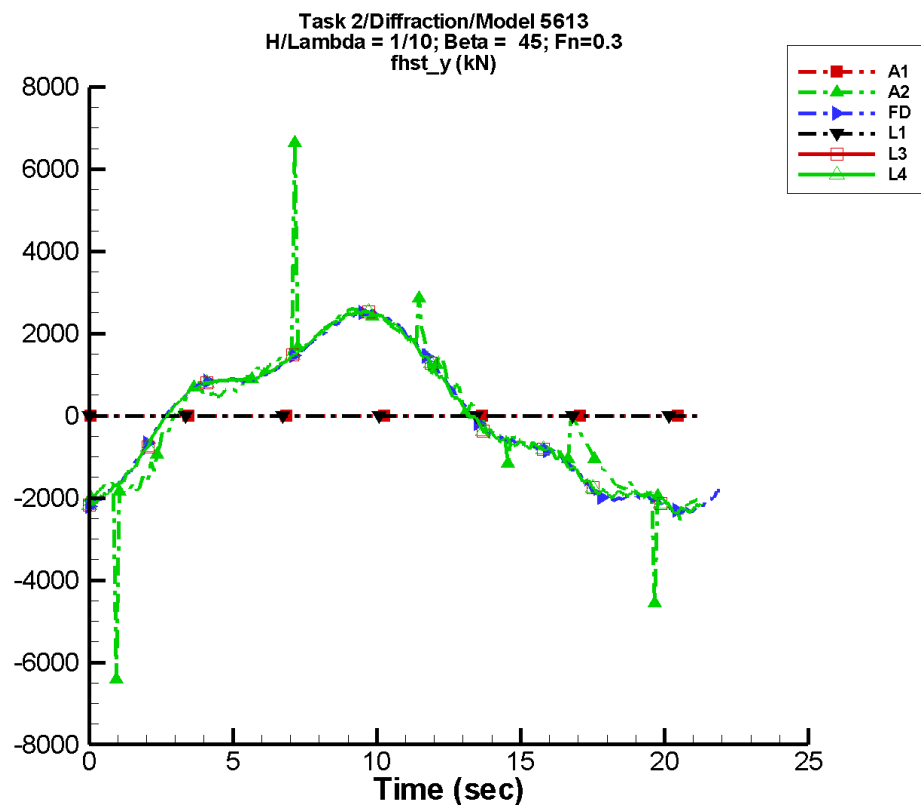
Table G–1117. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	4.54	5.67E+03	-101	7.11	153
A2	110.	5.48E+03	-118	1.74E+03	-61
FD	33.7	5.30E+03	-139	1.73E+03	-106
L1	9.73	5.59E+03	-110	8.66	-118
L3	12.7	4.67E+03	-118	1.48E+03	-66
L4	12.7	4.67E+03	-118	1.48E+03	-66
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1118. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-5.67E+03	5.67E+03	-5.69E+03	5.49E+03
A2	-6.34E+03	6.23E+03	-6.04E+03	5.90E+03
FD	-6.24E+03	5.90E+03	-5.91E+03	5.59E+03
L1	-5.59E+03	5.59E+03	-5.58E+03	5.53E+03
L3	-5.48E+03	5.14E+03	-5.37E+03	5.04E+03
L4	-5.48E+03	5.14E+03	-5.37E+03	5.04E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–560. Time history of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
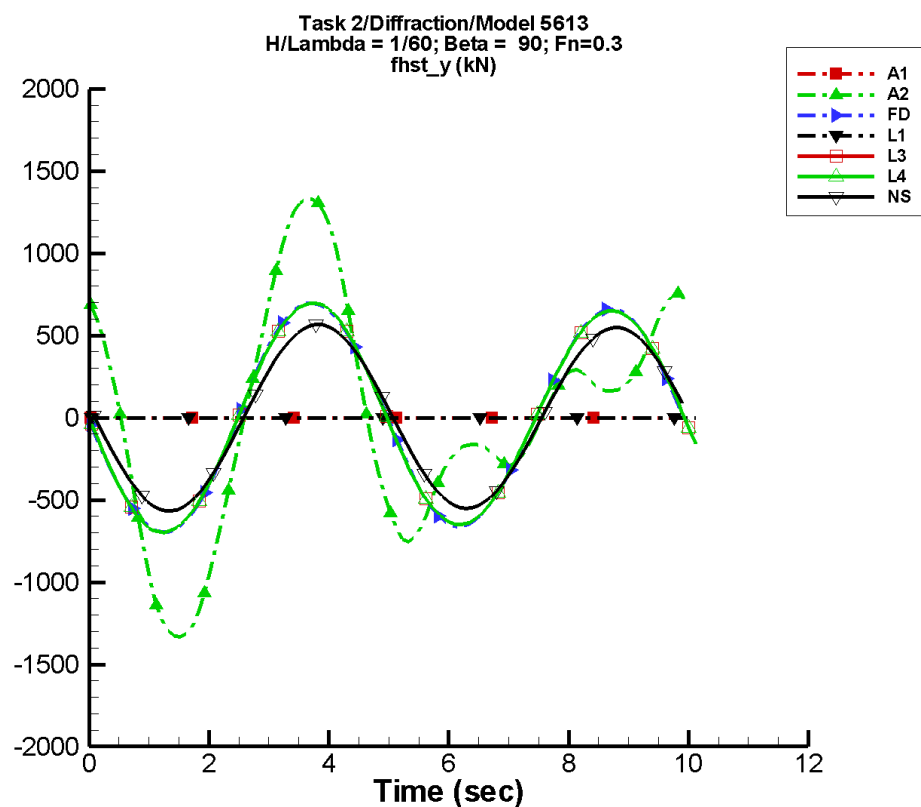
Table G–1119. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
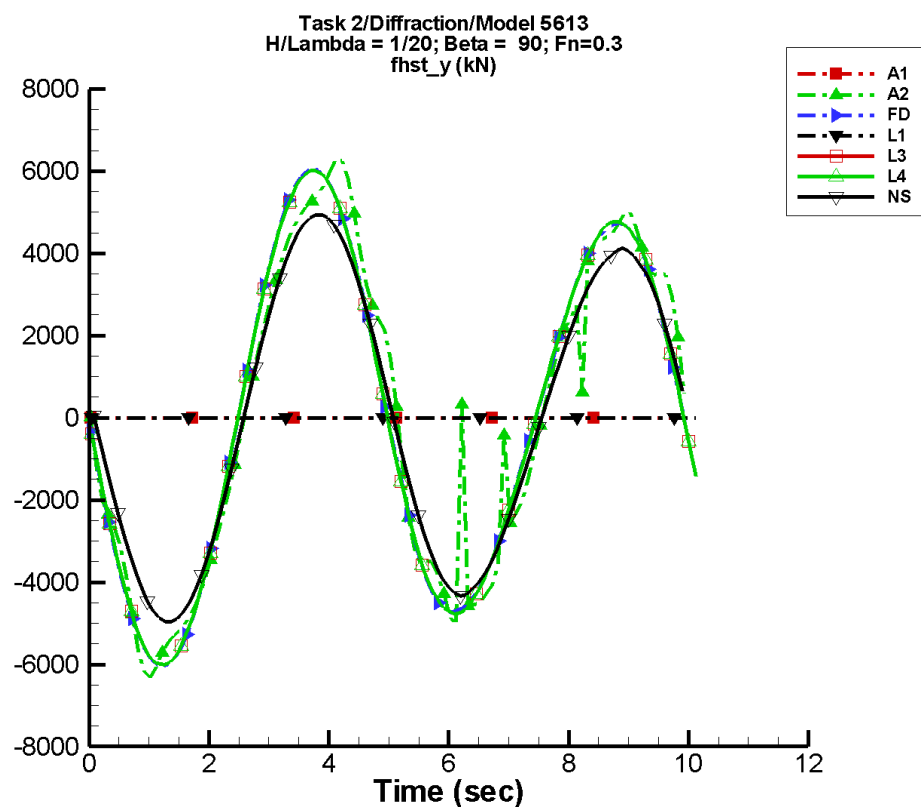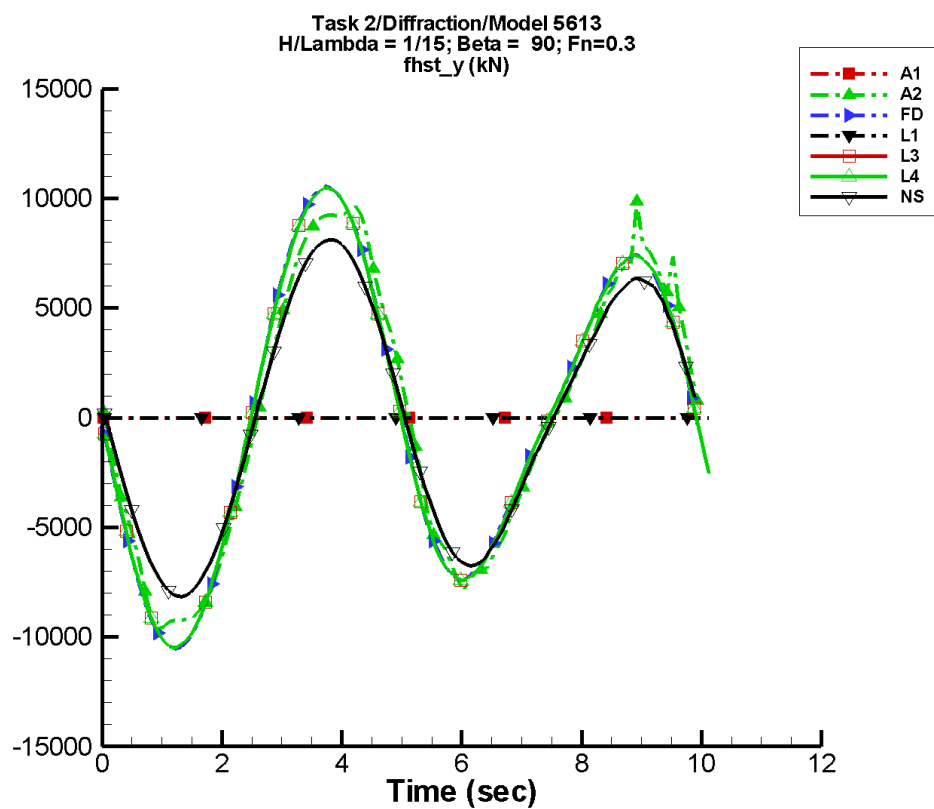
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	6.80	8.51E+03	-101	10.7	153
A2	352.	1.02E+04	-122	3.74E+03	-67
FD	53.4	9.20E+03	-142	3.19E+03	-111
L1	14.6	8.39E+03	-110	13.0	-118
L3	30.3	7.64E+03	-121	2.47E+03	-71
L4	30.3	7.64E+03	-121	2.47E+03	-71
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1120. Minimum and maximum of of F_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-8.51E+03	8.50E+03	-8.53E+03	8.24E+03
A2	-1.26E+04	1.22E+04	-1.15E+04	1.15E+04
FD	-1.13E+04	1.06E+04	-1.05E+04	9.90E+03
L1	-8.39E+03	8.39E+03	-8.37E+03	8.30E+03
L3	-9.39E+03	8.68E+03	-9.12E+03	8.46E+03
L4	-9.39E+03	8.68E+03	-9.12E+03	8.46E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–561. Time history of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
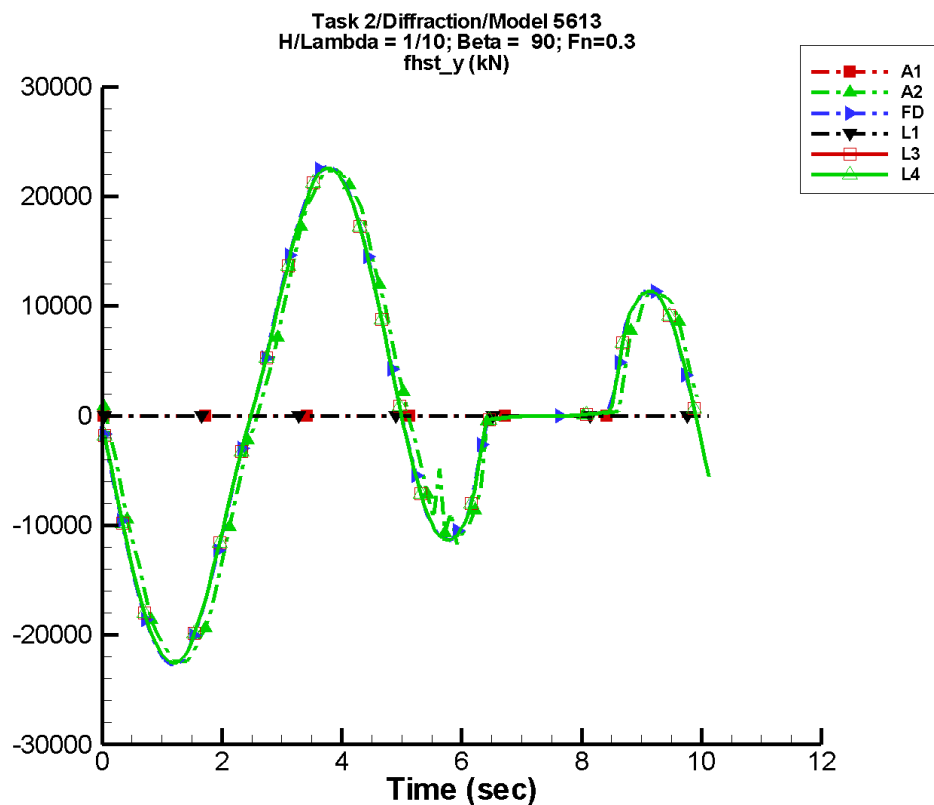
Table G–1121. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-2.68E-06	2.95E-03	20	3.61E-06	-8
A2	1.34E-05	9.43E-06	-49	7.52E-06	94
FD	1.19E-05	1.10E-05	-78	6.11E-06	153
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-3.10E-06	1.88E-04	-151	8.94E-05	-83

Table G–1122. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.95E-03	2.95E-03	-2.92E-03	2.94E-03
A2	-1.93E-05	7.38E-05	-9.04E-06	3.29E-05
FD	-8.99E-05	1.24E-04	-1.71E-05	4.57E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.27E-03	1.23E-03	-3.48E-04	2.58E-04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.0
ffk_y (kN)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–562. Time history of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
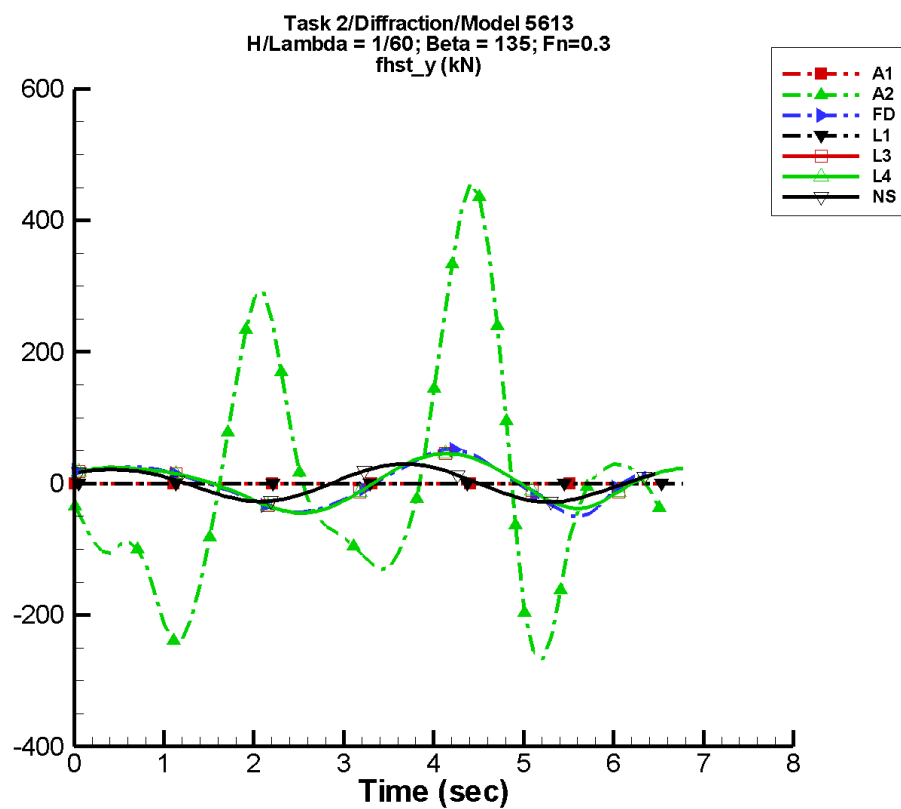
Table G–1123. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-8.05E-06	8.88E-03	20	1.09E-05	-8
A2	-41.6	70.2	155	50.9	15
FD	-1.57E-06	4.08E-06	-72	2.50E-05	-25
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	3.52E-04	1.58E-04	85	5.69E-04	10

Table G–1124. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-8.88E-03	8.88E-03	-8.79E-03	8.85E-03
A2	-3.40E+03	3.19E-02	-453.	39.1
FD	-1.65E-04	1.40E-04	-4.02E-05	6.16E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-3.85E-03	3.81E-03	-3.08E-04	1.60E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–563. Time history of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
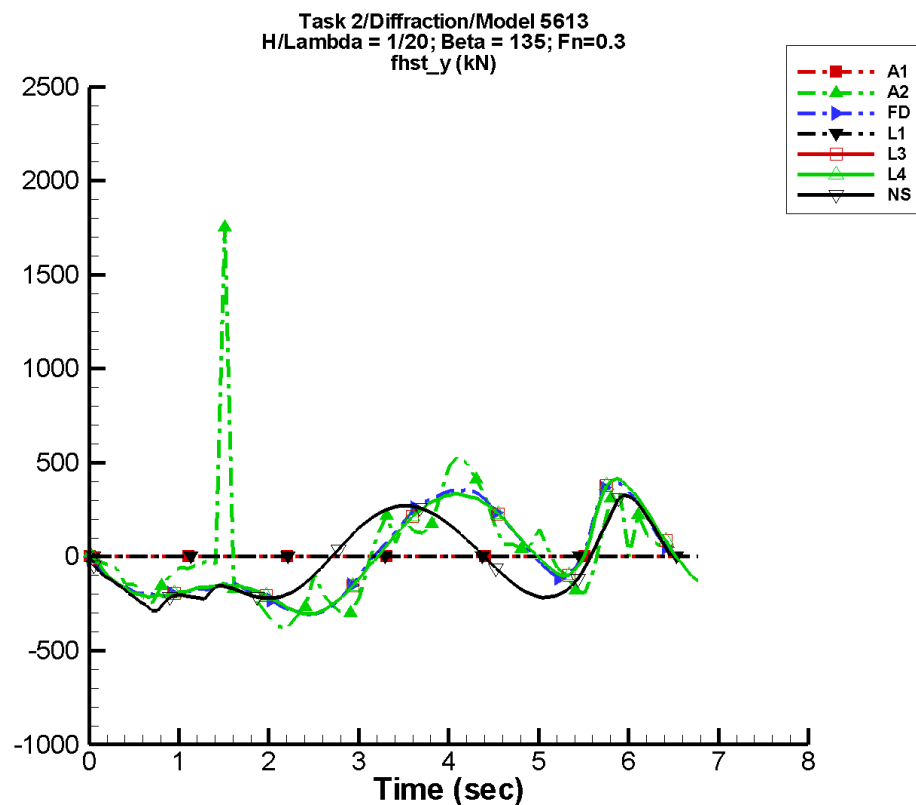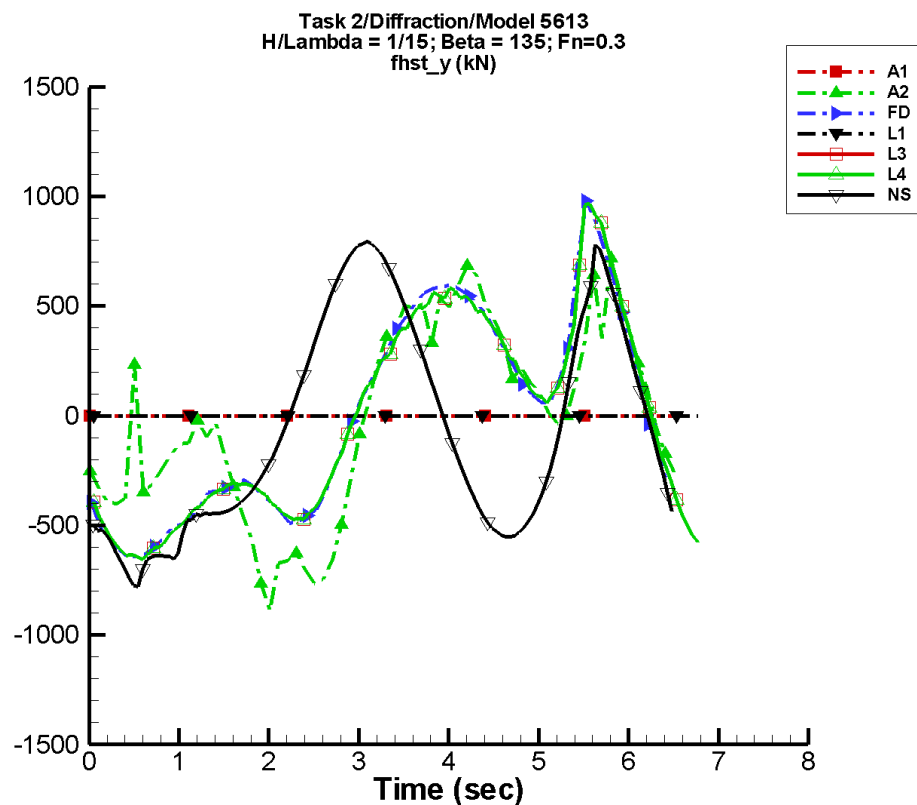
Table G–1125. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.07E-05	1.19E-02	20	1.45E-05	-8
A2	-4.85	10.4	-110	12.1	-135
FD	-1.44E-05	1.67E-05	-56	2.36E-05	-17
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.94E-05	2.27E-04	-37	6.12E-04	-99

Table G–1126. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.19E-02	1.19E-02	-1.17E-02	1.18E-02
A2	-922.	5.95E-04	-123.	10.5
FD	-2.17E-04	1.94E-04	-7.07E-05	4.14E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-5.20E-03	8.14E-03	-2.37E-03	1.80E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 0; Fn=0.0
ffk_y (kN)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–564. Time history of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
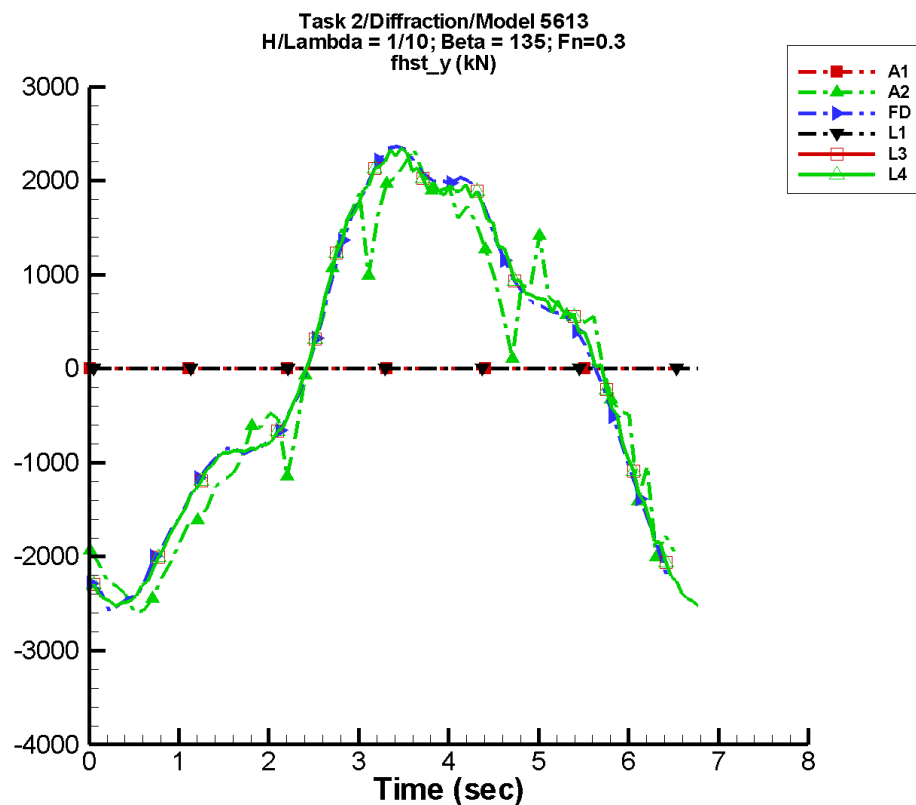
Table G–1127. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.61E-05	1.78E-02	20	2.18E-05	-8
A2	-4.90	9.55	-68	10.2	-42
FD	8.77E-06	3.20E-05	16	1.87E-05	29
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1128. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.78E-02	1.78E-02	-1.76E-02	1.77E-02
A2	-535.	2.97E-02	-75.5	6.43
FD	-2.42E-04	2.31E-04	-8.27E-05	8.83E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–565. Time history of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
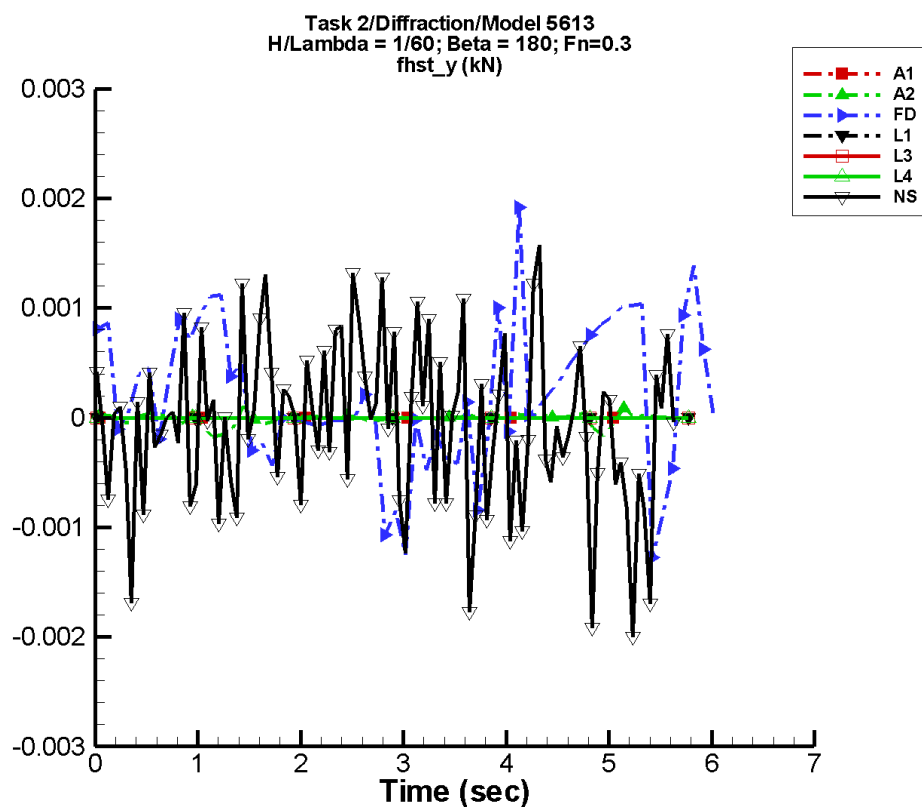
Table G–1129. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.38	1.76E+03	87	1.94	26
A2	-2.37	1.77E+03	86	137.	154
FD	-1.34	1.76E+03	84	77.8	165
L1	-0.670	1.75E+03	88	1.17	162
L3	-1.33	1.74E+03	88	85.6	175
L4	-1.33	1.74E+03	88	85.6	175
NF	—	—	—	—	—
NS	-3.72	1.78E+03	89	55.2	127

Table G–1130. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
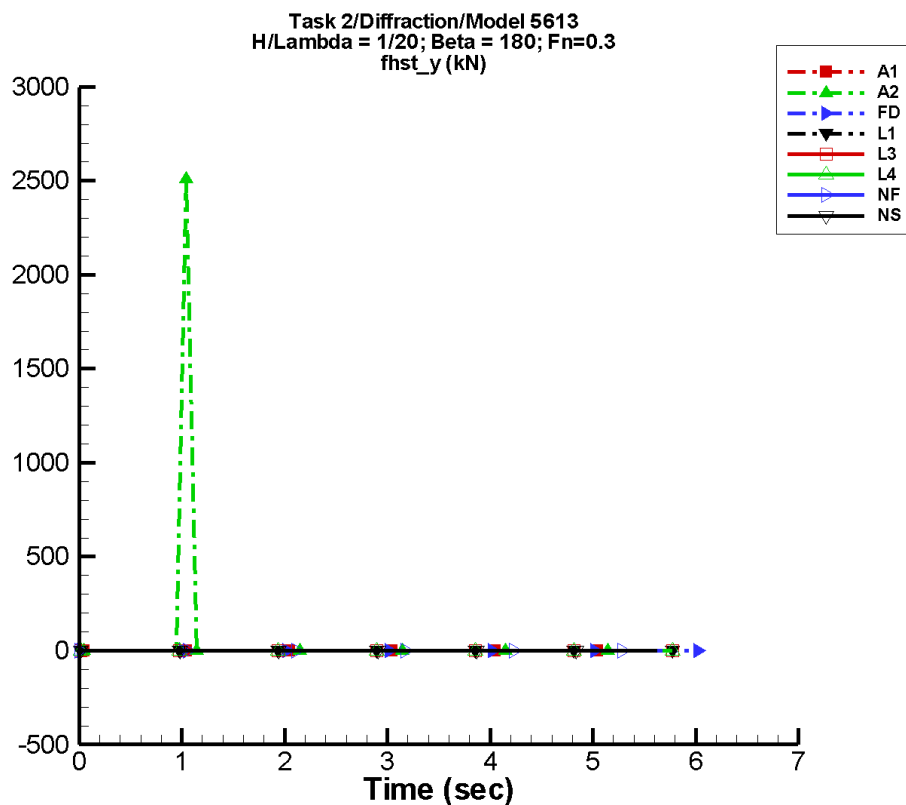
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.76E+03	1.76E+03	-1.74E+03	1.76E+03
A2	-1.76E+03	1.84E+03	-1.74E+03	1.82E+03
FD	-1.74E+03	1.76E+03	-1.72E+03	1.74E+03
L1	-1.75E+03	1.75E+03	-1.75E+03	1.75E+03
L3	-1.73E+03	1.74E+03	-1.72E+03	1.74E+03
L4	-1.73E+03	1.74E+03	-1.72E+03	1.74E+03
NF	—	—	—	—
NS	-1.74E+03	1.82E+03	-1.73E+03	1.81E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–566. Time history of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
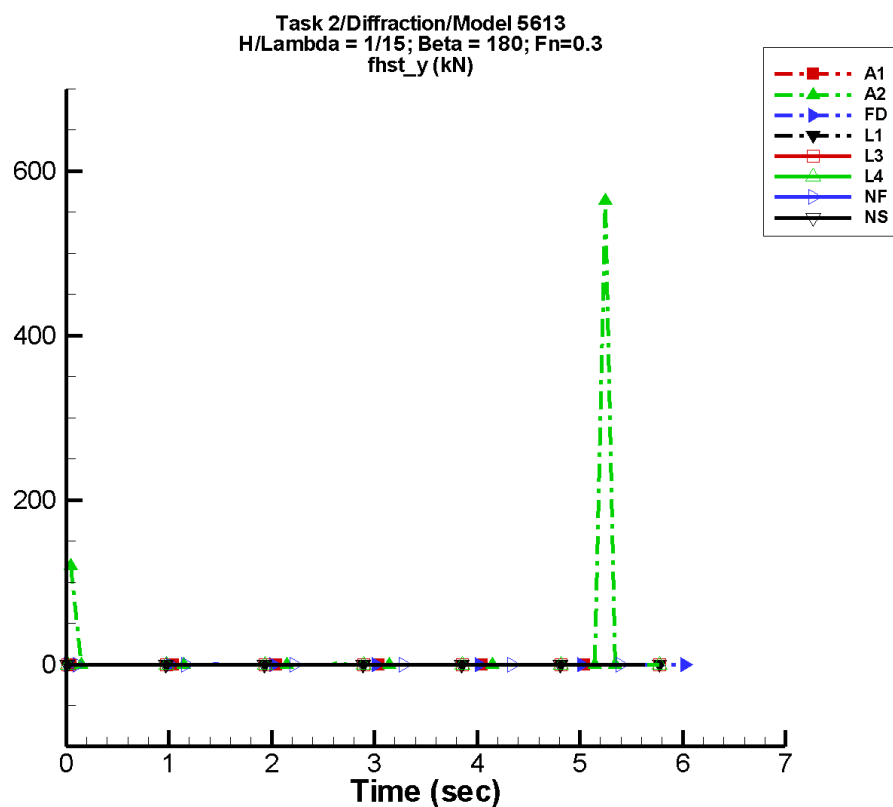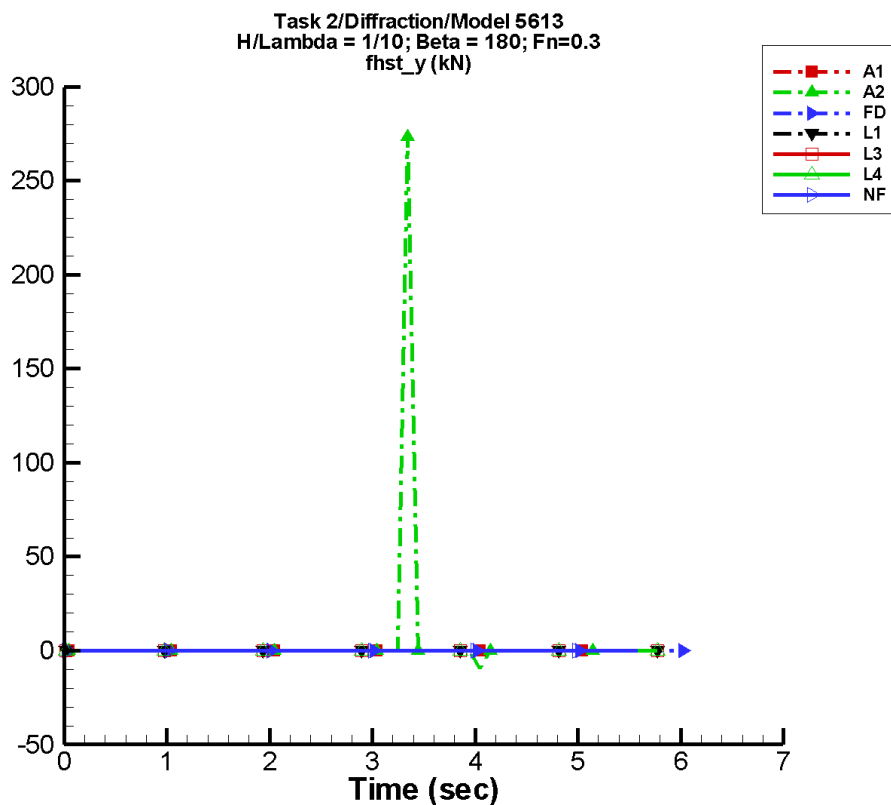
Table G–1131. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-4.15	5.29E+03	87	5.83	26
A2	-8.00	5.52E+03	89	373.	134
FD	-20.3	5.44E+03	87	338.	152
L1	-2.01	5.25E+03	88	3.50	162
L3	-8.53	5.00E+03	91	315.	164
L4	-8.53	5.00E+03	91	315.	164
NF	—	—	—	—	—
NS	-5.77	5.28E+03	90	355.	100

Table G–1132. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-5.29E+03	5.29E+03	-5.24E+03	5.28E+03
A2	-5.34E+03	7.62E+03	-5.30E+03	5.89E+03
FD	-5.39E+03	5.69E+03	-5.33E+03	5.62E+03
L1	-5.25E+03	5.25E+03	-5.24E+03	5.26E+03
L3	-4.94E+03	5.18E+03	-4.92E+03	5.16E+03
L4	-4.94E+03	5.18E+03	-4.92E+03	5.16E+03
NF	—	—	—	—
NS	-5.15E+03	5.74E+03	-5.09E+03	5.67E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 45; Fn=0.0
ffk_y (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–567. Time history of F_y^{ffk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
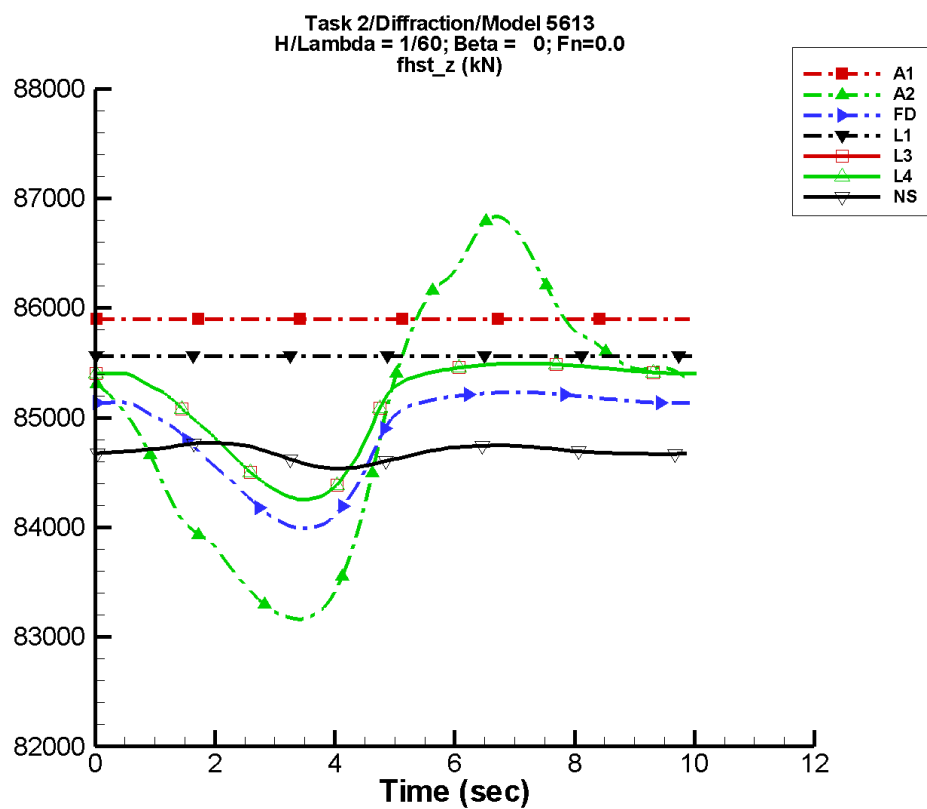
Table G–1133. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-5.54	7.07E+03	87	7.78	26
A2	-46.3	7.98E+03	91	307.	133
FD	-34.4	7.49E+03	90	318.	159
L1	-2.68	7.01E+03	88	4.67	162
L3	1.64	6.63E+03	94	267.	179
L4	1.64	6.63E+03	94	267.	179
NF	—	—	—	—	—
NS	21.2	7.17E+03	88	900.	46

Table G–1134. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-7.07E+03	7.07E+03	-7.00E+03	7.05E+03
A2	-8.99E+03	8.50E+03	-8.08E+03	8.39E+03
FD	-7.74E+03	7.91E+03	-7.61E+03	7.81E+03
L1	-7.01E+03	7.01E+03	-6.98E+03	7.01E+03
L3	-6.80E+03	6.91E+03	-6.77E+03	6.88E+03
L4	-6.80E+03	6.91E+03	-6.77E+03	6.88E+03
NF	—	—	—	—
NS	-7.17E+03	8.23E+03	-7.08E+03	8.23E+03

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–568. Time history of F_y^{ffk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

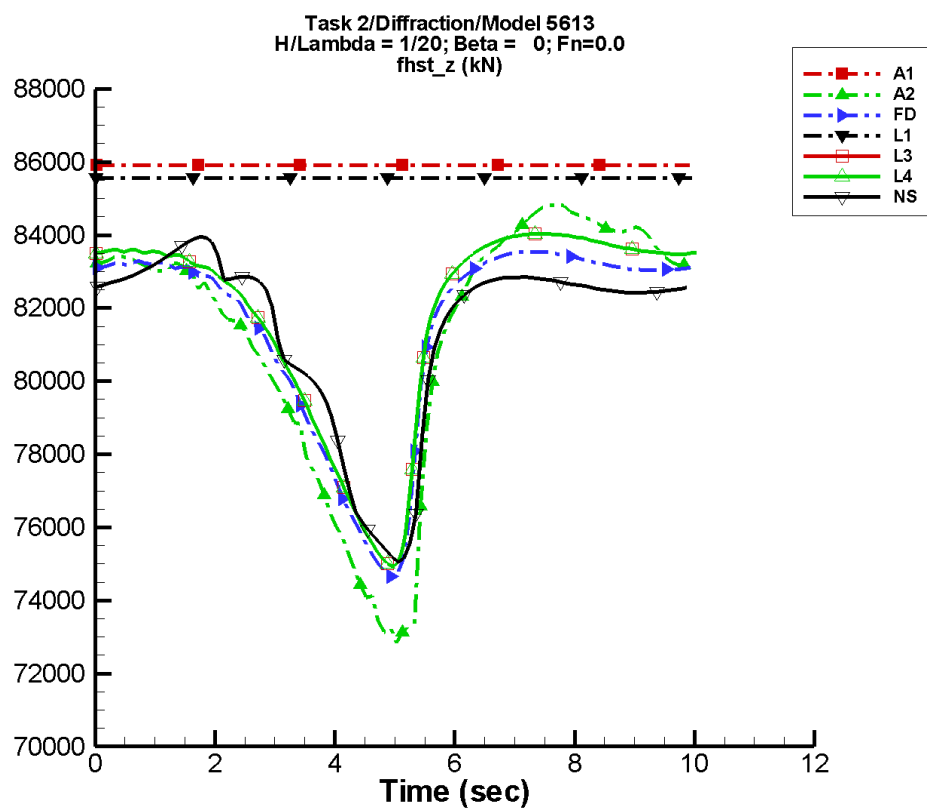Table G–1135. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-8.30	1.06E+04	87	11.7	26
A2	395.	1.37E+04	94	981.	107
FD	-31.1	1.33E+04	92	624.	169
L1	-4.02	1.05E+04	88	7.00	162
L3	14.2	1.11E+04	96	467.	-177
L4	14.2	1.11E+04	96	467.	-177
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1136. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.06E+04	1.06E+04	-1.05E+04	1.06E+04
A2	-1.50E+04	2.93E+04	-1.48E+04	1.55E+04
FD	-1.40E+04	1.42E+04	-1.37E+04	1.39E+04
L1	-1.05E+04	1.05E+04	-1.05E+04	1.05E+04
L3	-1.16E+04	1.17E+04	-1.15E+04	1.15E+04
L4	-1.16E+04	1.17E+04	-1.15E+04	1.15E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–569. Time history of F_y^{ffk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
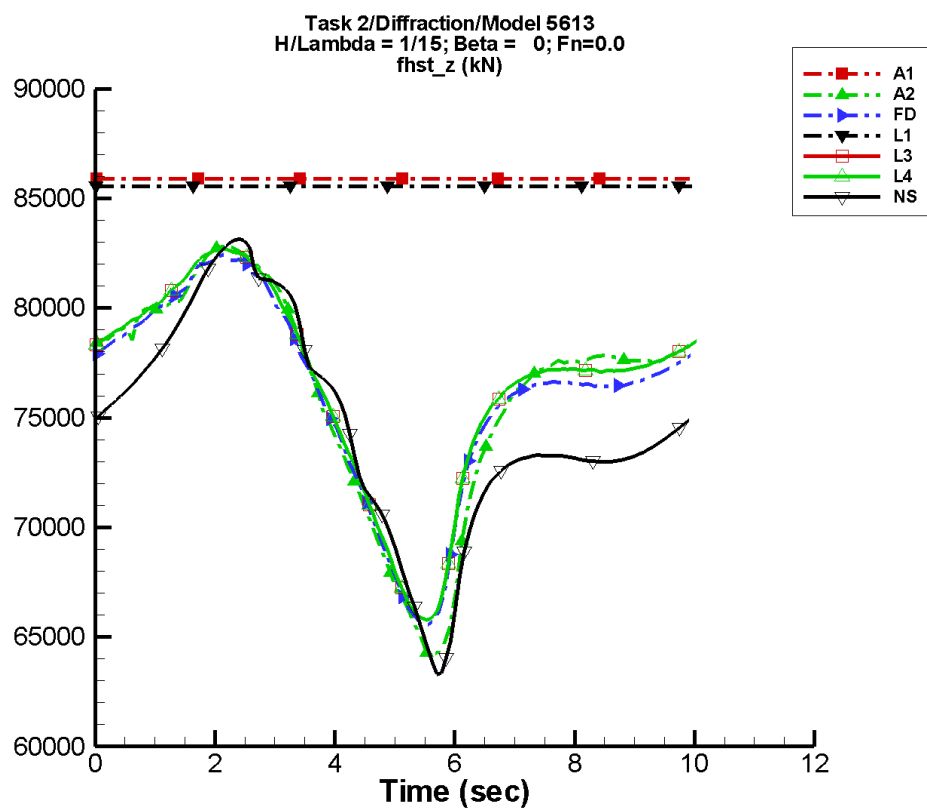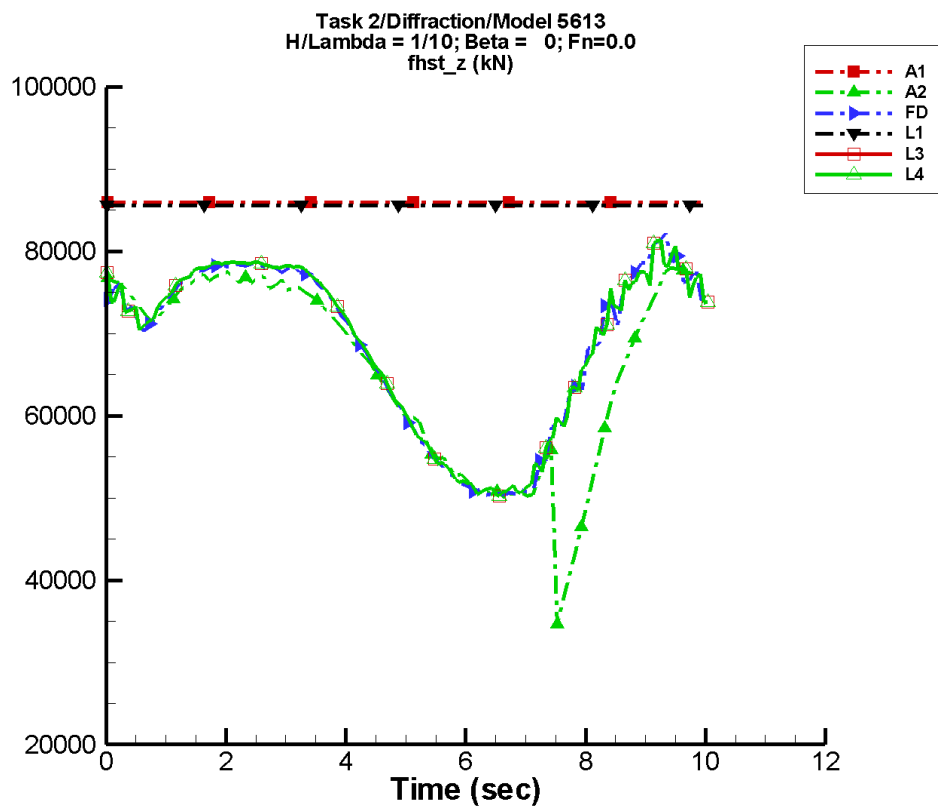
Table G–1137. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-3.24	4.04E+03	86	4.52	24
A2	-2.89	4.09E+03	82	1.28E+03	-15
FD	-2.61	4.07E+03	82	1.34E+03	-15
L1	-1.02	4.02E+03	86	1.63	-29
L3	1.72E-02	4.03E+03	86	1.17E+03	-8
L4	1.72E-02	4.03E+03	86	1.17E+03	-8
NF	—	—	—	—	—
NS	-4.21	3.97E+03	88	1.21E+03	-7

Table G–1138. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-4.04E+03	4.04E+03	-4.00E+03	4.04E+03
A2	-4.78E+03	4.77E+03	-4.68E+03	4.68E+03
FD	-4.72E+03	4.72E+03	-4.63E+03	4.64E+03
L1	-4.02E+03	4.02E+03	-4.01E+03	4.04E+03
L3	-4.56E+03	4.56E+03	-4.53E+03	4.54E+03
L4	-4.56E+03	4.56E+03	-4.53E+03	4.54E+03
NF	—	—	—	—
NS	-4.56E+03	4.47E+03	-4.48E+03	4.40E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–570. Time history of F_y^{ffk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
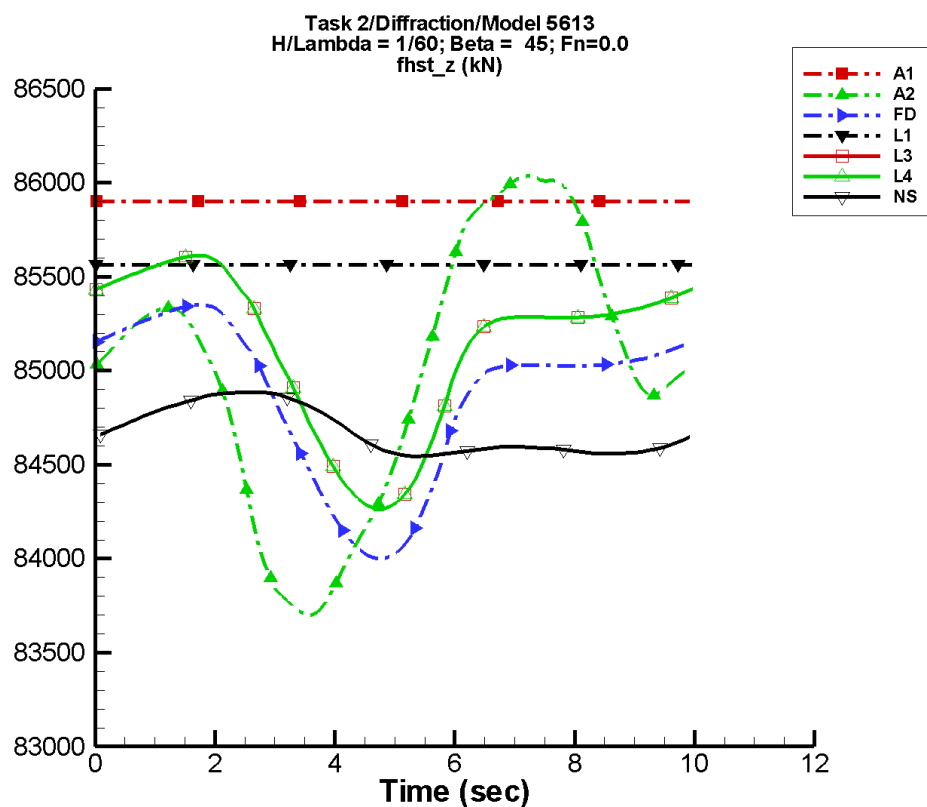
Table G–1139. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-9.75	1.21E+04	86	13.6	24
A2	44.4	1.34E+04	82	1.17E+04	-17
FD	-33.8	1.33E+04	82	1.08E+04	-15
L1	-3.07	1.21E+04	86	4.89	-29
L3	12.4	1.22E+04	86	9.46E+03	-8
L4	12.4	1.22E+04	86	9.46E+03	-8
NF	—	—	—	—	—
NS	18.1	1.20E+04	88	1.01E+04	-7

Table G–1140. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.21E+04	1.21E+04	-1.20E+04	1.21E+04
A2	-2.24E+04	2.24E+04	-2.18E+04	2.18E+04
FD	-2.15E+04	2.15E+04	-2.09E+04	2.09E+04
L1	-1.21E+04	1.21E+04	-1.20E+04	1.21E+04
L3	-1.91E+04	1.91E+04	-1.89E+04	1.89E+04
L4	-1.91E+04	1.91E+04	-1.89E+04	1.89E+04
NF	—	—	—	—
NS	-1.98E+04	1.95E+04	-1.93E+04	1.90E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–571. Time history of F_y^{ffk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

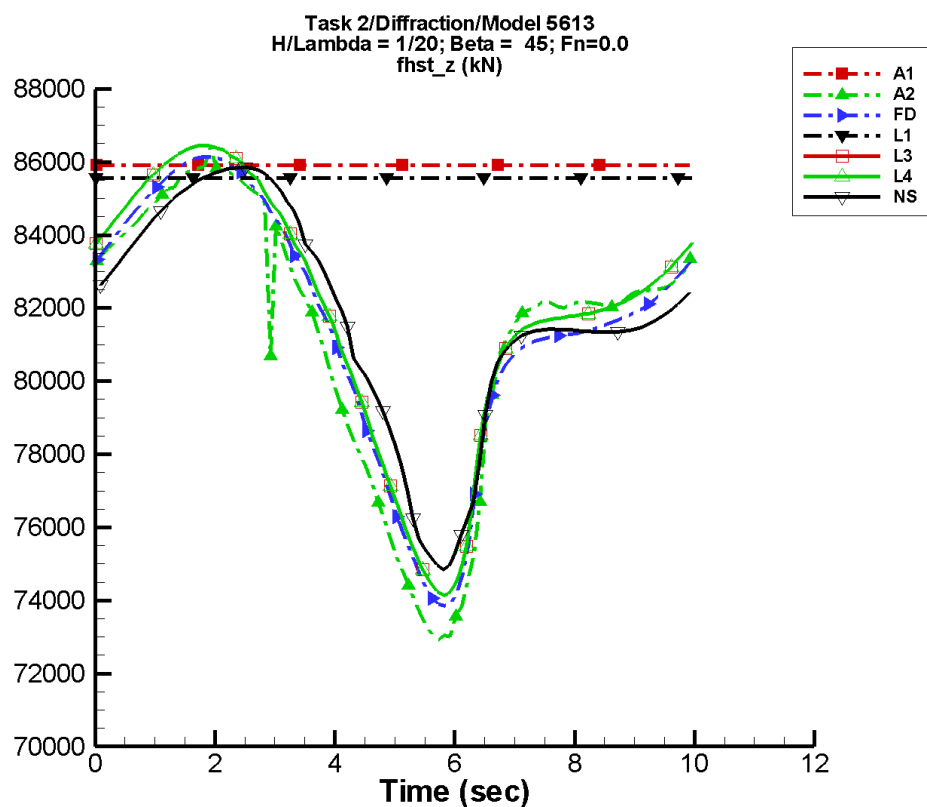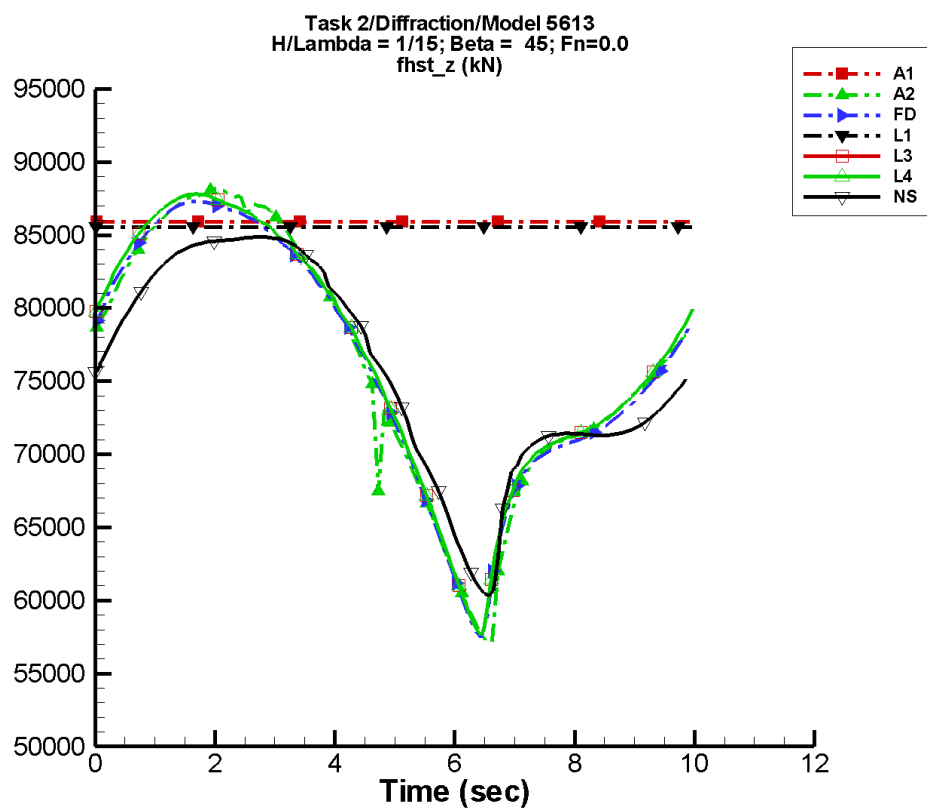Table G–1141. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-13.0	1.62E+04	86	18.2	24
A2	11.5	1.96E+04	81	2.00E+04	-17
FD	-74.3	1.88E+04	82	1.84E+04	-15
L1	-4.09	1.61E+04	86	6.53	-29
L3	30.4	1.66E+04	86	1.57E+04	-8
L4	30.4	1.66E+04	86	1.57E+04	-8
NF	—	—	—	—	—
NS	80.7	1.57E+04	88	1.64E+04	-6

Table G–1142. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.62E+04	1.62E+04	-1.60E+04	1.62E+04
A2	-3.63E+04	3.64E+04	-3.50E+04	3.52E+04
FD	-3.36E+04	3.36E+04	-3.26E+04	3.27E+04
L1	-1.61E+04	1.61E+04	-1.60E+04	1.62E+04
L3	-2.89E+04	2.89E+04	-2.86E+04	2.86E+04
L4	-2.89E+04	2.89E+04	-2.86E+04	2.86E+04
NF	—	—	—	—
NS	-2.92E+04	2.88E+04	-2.87E+04	2.83E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–572. Time history of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
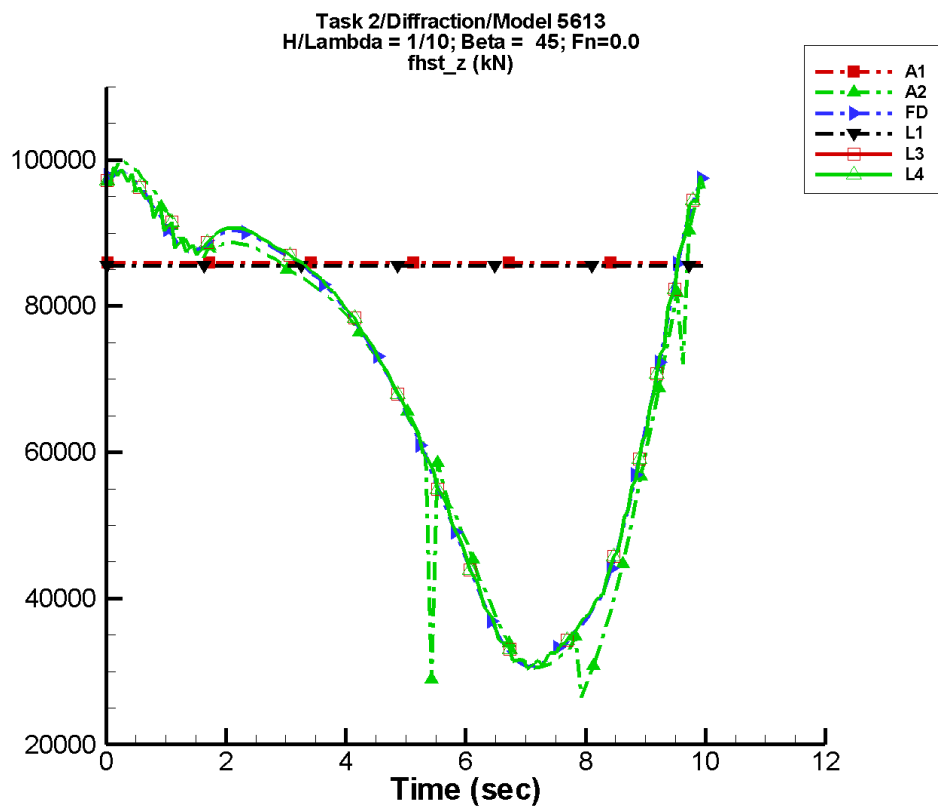
Table G–1143. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-19.5	2.43E+04	86	27.2	24
A2	86.4	3.63E+04	81	3.87E+04	-17
FD	-284.	3.36E+04	81	3.50E+04	-13
L1	-6.13	2.41E+04	86	9.78	-29
L3	152.	2.80E+04	86	2.79E+04	-8
L4	152.	2.80E+04	86	2.79E+04	-8
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1144. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.43E+04	2.43E+04	-2.41E+04	2.43E+04
A2	-7.21E+04	7.20E+04	-6.94E+04	6.94E+04
FD	-6.49E+04	6.49E+04	-6.27E+04	6.28E+04
L1	-2.41E+04	2.41E+04	-2.41E+04	2.42E+04
L3	-5.24E+04	5.24E+04	-5.18E+04	5.18E+04
L4	-5.24E+04	5.24E+04	-5.18E+04	5.18E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–573. Time history of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
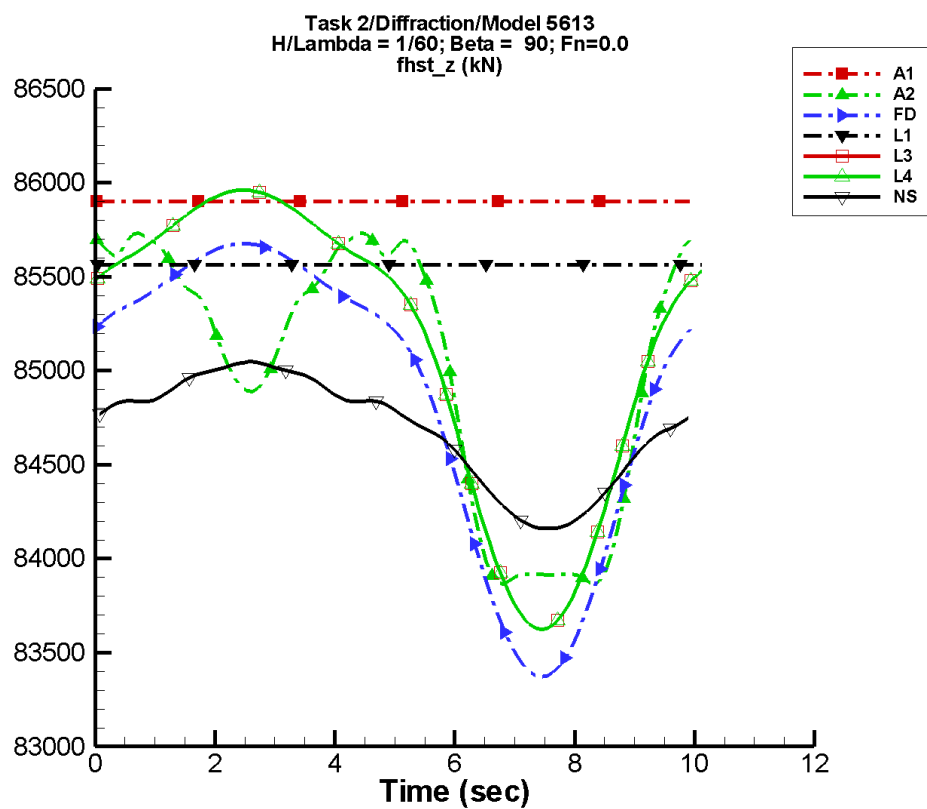
Table G–1145. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.45	1.76E+03	84	2.00	23
A2	-1.17	1.77E+03	78	133.	171
FD	-0.724	1.76E+03	80	78.3	162
L1	-1.85	1.75E+03	84	1.24	79
L3	-1.41	1.74E+03	84	86.1	167
L4	-1.41	1.74E+03	84	86.1	167
NF	—	—	—	—	—
NS	-3.63	1.78E+03	87	53.1	-142

Table G–1146. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
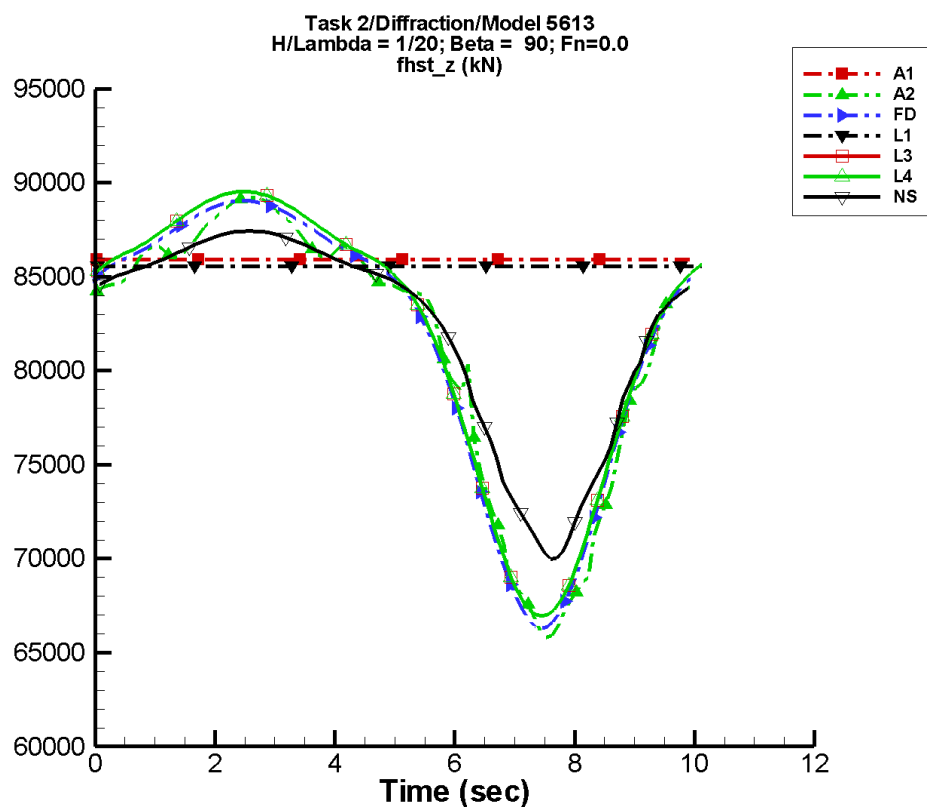
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.76E+03	1.76E+03	-1.74E+03	1.76E+03
A2	-1.84E+03	1.76E+03	-1.82E+03	1.76E+03
FD	-1.76E+03	1.74E+03	-1.74E+03	1.73E+03
L1	-1.75E+03	1.75E+03	-1.74E+03	1.75E+03
L3	-1.74E+03	1.73E+03	-1.74E+03	1.72E+03
L4	-1.74E+03	1.73E+03	-1.74E+03	1.72E+03
NF	—	—	—	—
NS	-1.82E+03	1.74E+03	-1.80E+03	1.74E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–574. Time history of F_y^{ffk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
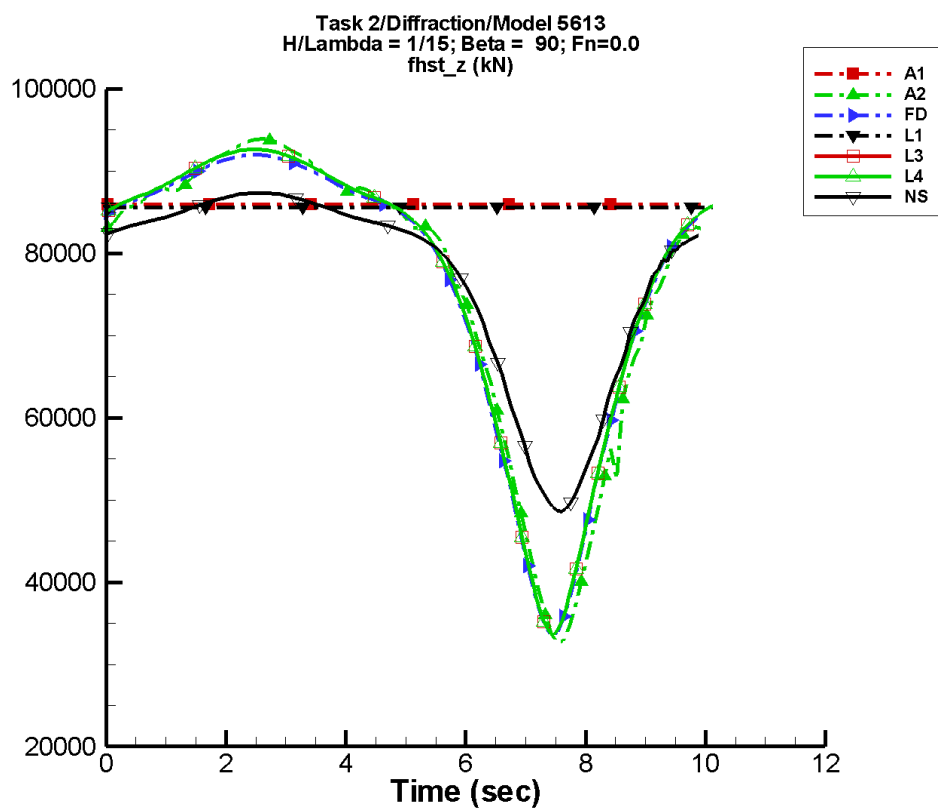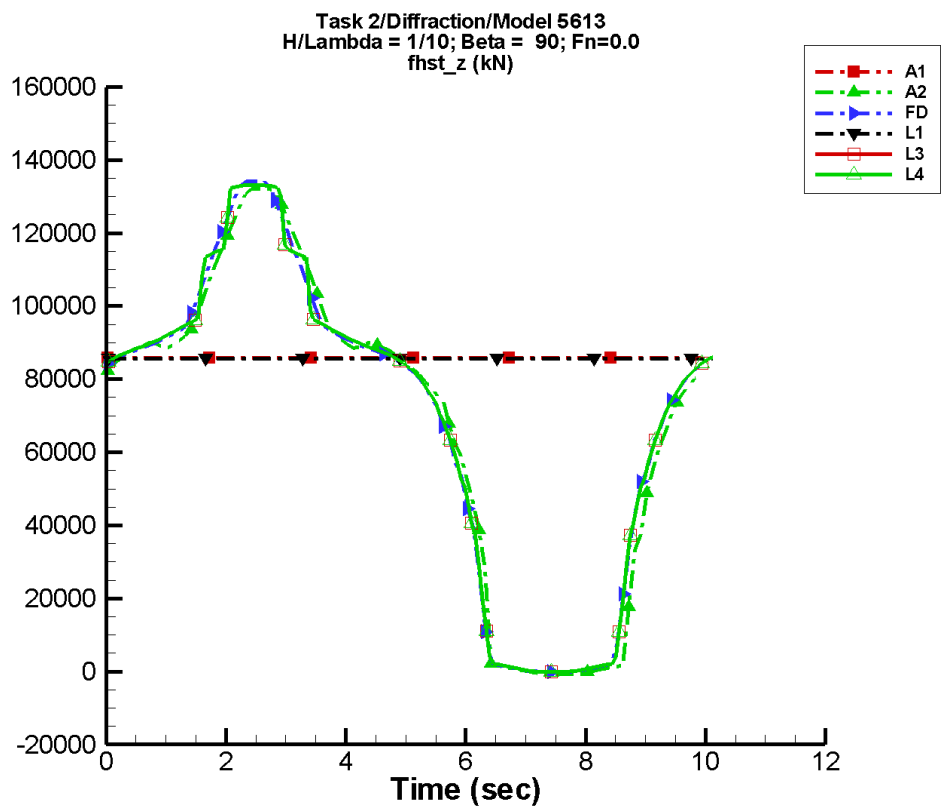
Table G–1147. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-4.35	5.29E+03	84	6.03	23
A2	-9.53	5.60E+03	75	367.	-166
FD	9.60	5.50E+03	77	379.	169
L1	-5.56	5.25E+03	84	3.72	79
L3	-1.53	5.03E+03	81	348.	179
L4	-1.53	5.03E+03	81	348.	179
NF	—	—	—	—	—
NS	5.52	5.34E+03	86	308.	-111

Table G–1148. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-5.29E+03	5.29E+03	-5.24E+03	5.30E+03
A2	-6.80E+03	5.35E+03	-6.01E+03	5.31E+03
FD	-5.69E+03	5.40E+03	-5.62E+03	5.41E+03
L1	-5.25E+03	5.25E+03	-5.23E+03	5.25E+03
L3	-5.18E+03	4.94E+03	-5.16E+03	4.93E+03
L4	-5.18E+03	4.94E+03	-5.16E+03	4.93E+03
NF	—	—	—	—
NS	-5.74E+03	5.14E+03	-5.67E+03	5.14E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.0
ffk_y (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–575. Time history of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
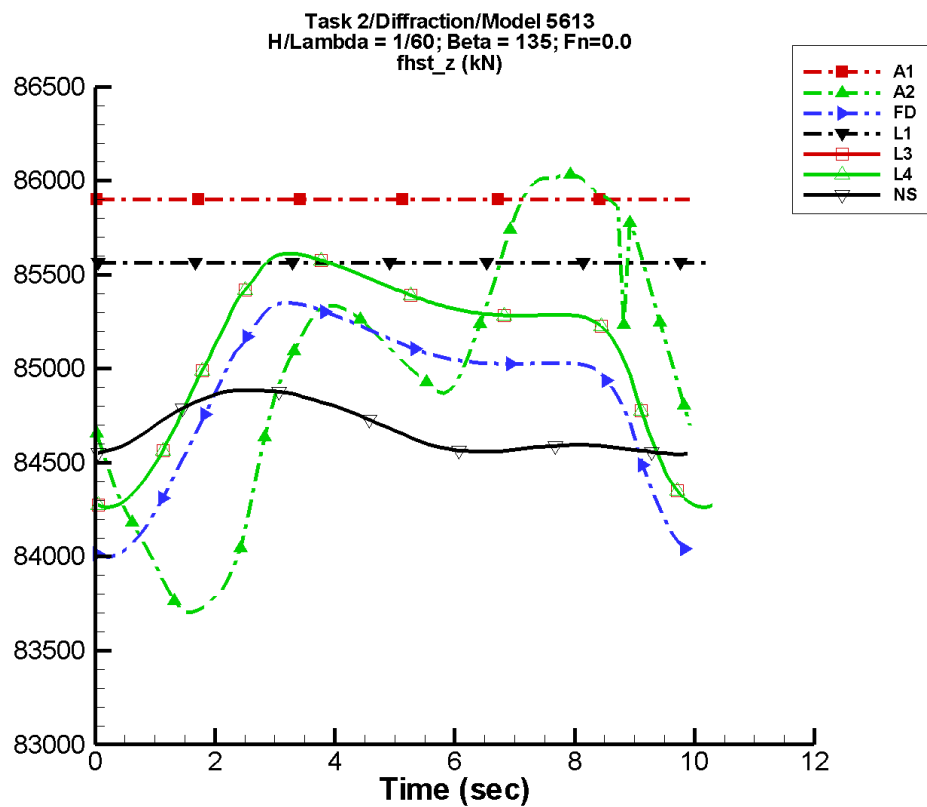
Table G–1149. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-5.81	7.07E+03	84	8.05	23
A2	-83.9	8.13E+03	73	268.	-148
FD	30.4	7.60E+03	75	427.	165
L1	-7.41	7.00E+03	84	4.96	79
L3	-6.10	6.66E+03	78	312.	176
L4	-6.10	6.66E+03	78	312.	176
NF	—	—	—	—	—
NS	26.9	7.23E+03	89	803.	-50

Table G–1150. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-7.07E+03	7.07E+03	-7.00E+03	7.08E+03
A2	-1.39E+04	8.04E+03	-9.02E+03	7.90E+03
FD	-7.91E+03	7.74E+03	-7.81E+03	7.71E+03
L1	-7.01E+03	7.01E+03	-6.98E+03	6.99E+03
L3	-6.91E+03	6.80E+03	-6.88E+03	6.78E+03
L4	-6.91E+03	6.80E+03	-6.88E+03	6.78E+03
NF	—	—	—	—
NS	-8.23E+03	7.17E+03	-8.15E+03	7.19E+03

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–576. Time history of F_y^{ffk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1151. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
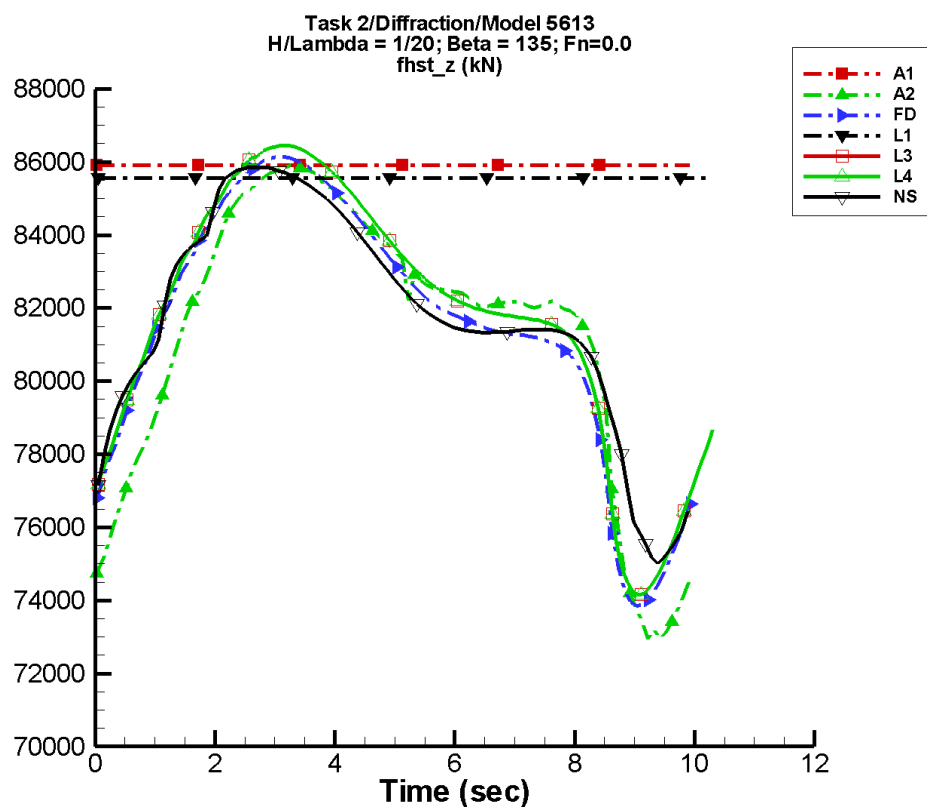
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-8.71	1.06E+04	84	12.1	23
A2	-14.3	1.46E+04	72	813.	166
FD	54.7	1.35E+04	73	760.	162
L1	-11.1	1.05E+04	84	7.44	79
L3	-13.9	1.11E+04	76	461.	169
L4	-13.9	1.11E+04	76	461.	169
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1152. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.06E+04	1.06E+04	-1.05E+04	1.06E+04
A2	-1.60E+04	1.49E+04	-1.56E+04	1.46E+04
FD	-1.42E+04	1.40E+04	-1.39E+04	1.39E+04
L1	-1.05E+04	1.05E+04	-1.05E+04	1.05E+04
L3	-1.17E+04	1.16E+04	-1.15E+04	1.15E+04
L4	-1.17E+04	1.16E+04	-1.15E+04	1.15E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–577. Time history of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
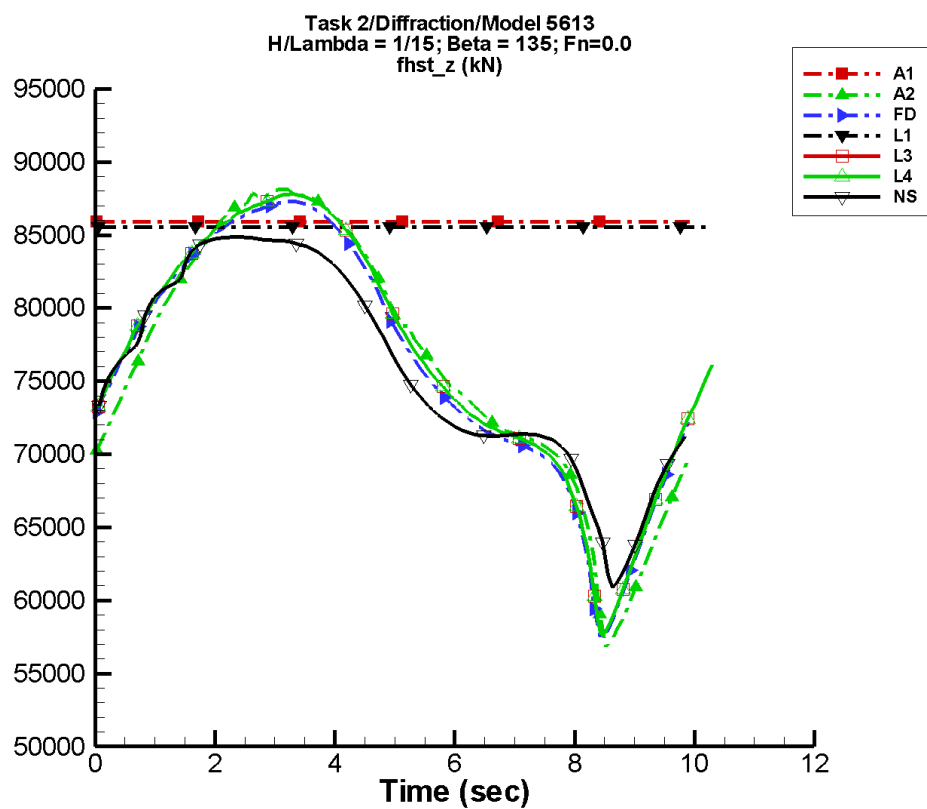
Table G–1153. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-7.28E-07	2.95E-03	-29	1.99E-06	-56
A2	1.46E-05	1.10E-05	32	2.91E-06	56
FD	-3.26E-05	9.97E-05	-115	2.09E-05	161
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	5.37E-05	2.54E-04	122	4.56E-05	7

Table G–1154. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

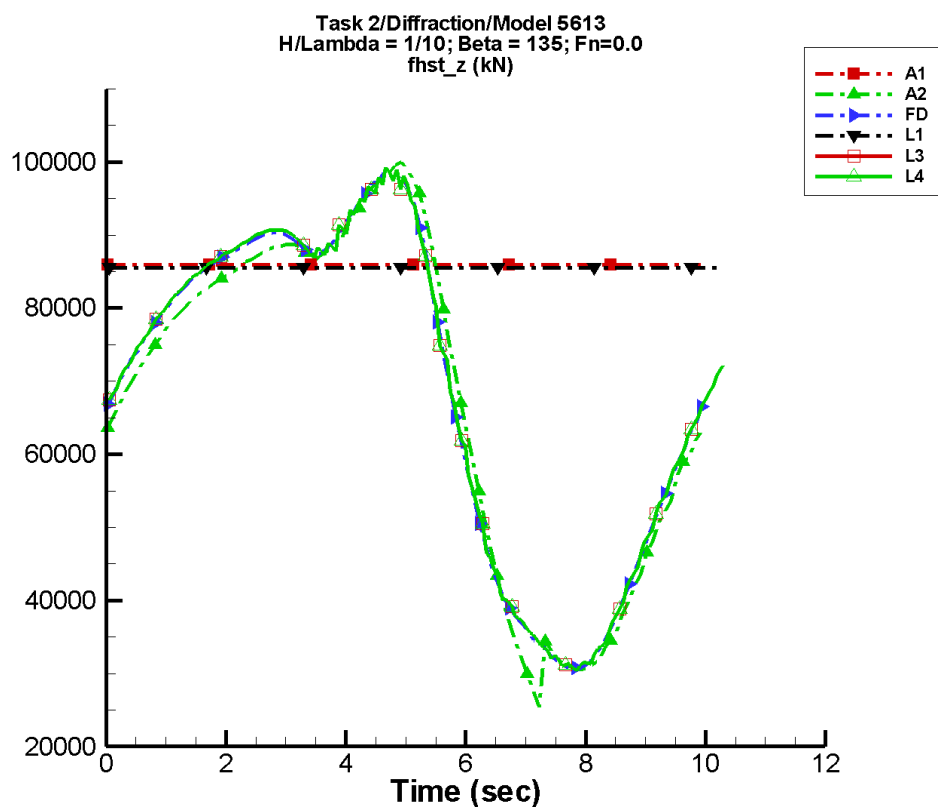| Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.95E-03	2.95E-03	-2.92E-03	2.92E-03
A2	-2.23E-05	8.26E-05	-1.02E-05	5.55E-05
FD	-1.10E-03	1.22E-03	-2.38E-04	1.96E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.19E-03	1.11E-03	-2.80E-04	5.61E-04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 180; Fn=0.0
ffk_y (kN)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–578. Time history of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
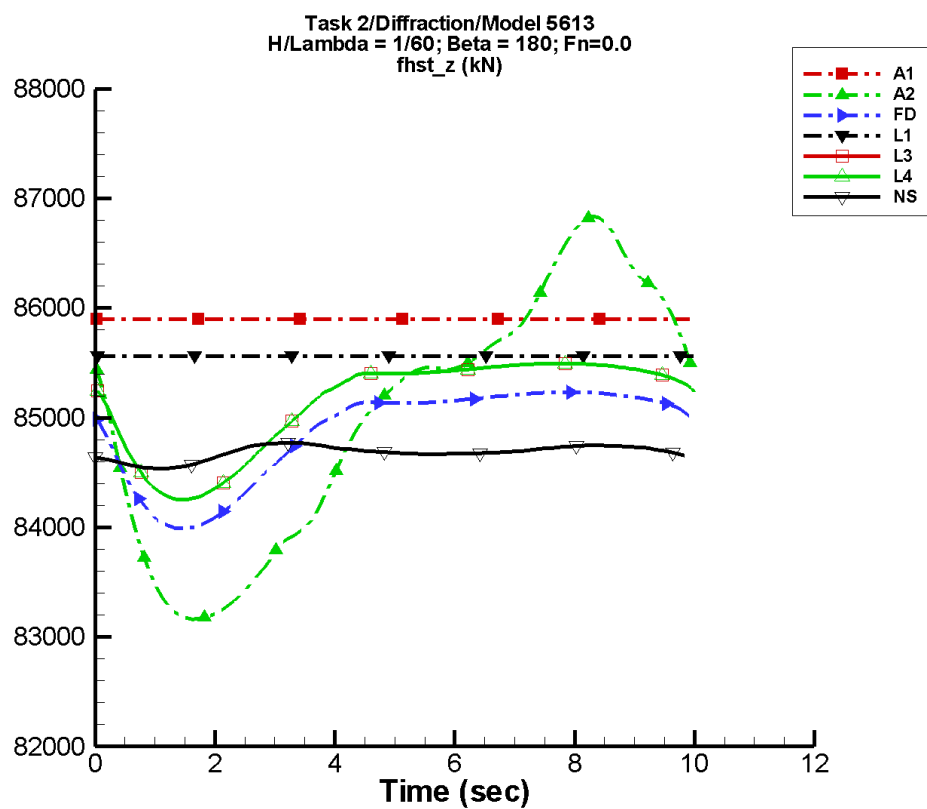
Table G–1155. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-2.19E-06	8.88E-03	-29	5.98E-06	-56
A2	31.9	130.	112	118.	104
FD	-3.15E-03	1.13E-03	-103	4.41E-03	82
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-3.62E-05	3.91E-04	-100	3.85E-04	149

Table G–1156. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-8.88E-03	8.88E-03	-8.79E-03	8.79E-03
A2	-1.21E+03	7.09E+03	-179.	949.
FD	-1.04E-02	1.45E-02	-9.65E-03	1.66E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-4.77E-03	3.99E-03	-1.96E-03	1.11E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–579. Time history of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
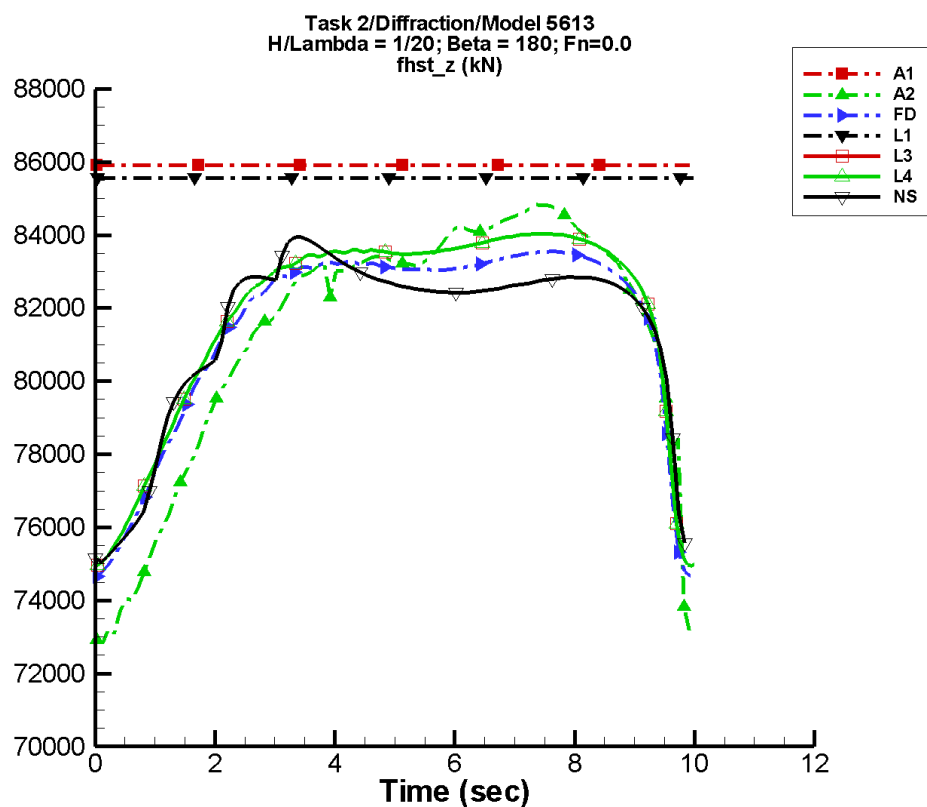
Table G–1157. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-2.93E-06	1.19E-02	-29	7.98E-06	-56
A2	-11.9	20.0	-109	10.5	-148
FD	-3.32E-03	2.36E-03	179	2.71E-03	67
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	1.22E-04	2.30E-04	56	5.34E-04	-71

Table G–1158. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

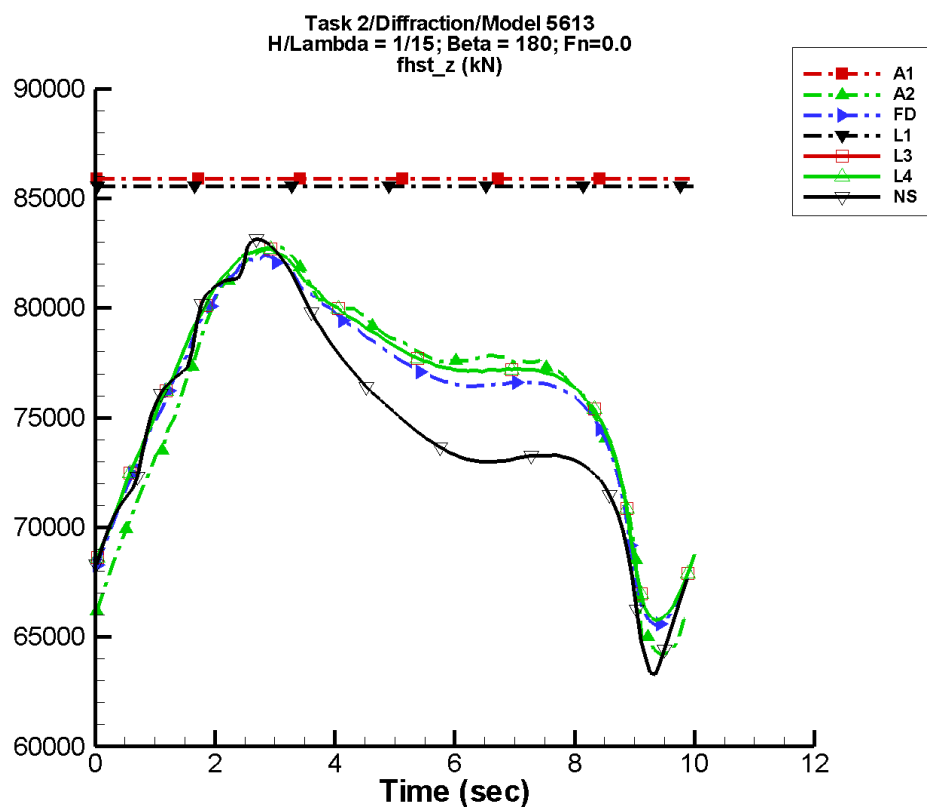| Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.19E-02	1.19E-02	-1.17E-02	1.17E-02
A2	-1.37E+03	5.63E-04	-183.	15.7
FD	-1.63E-02	4.83E-03	-1.13E-02	1.54E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-5.71E-03	5.84E-03	-1.26E-03	2.12E-03

G–1399

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 180; Fn=0.0
ffk_y (kN)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–580. Time history of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1159. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
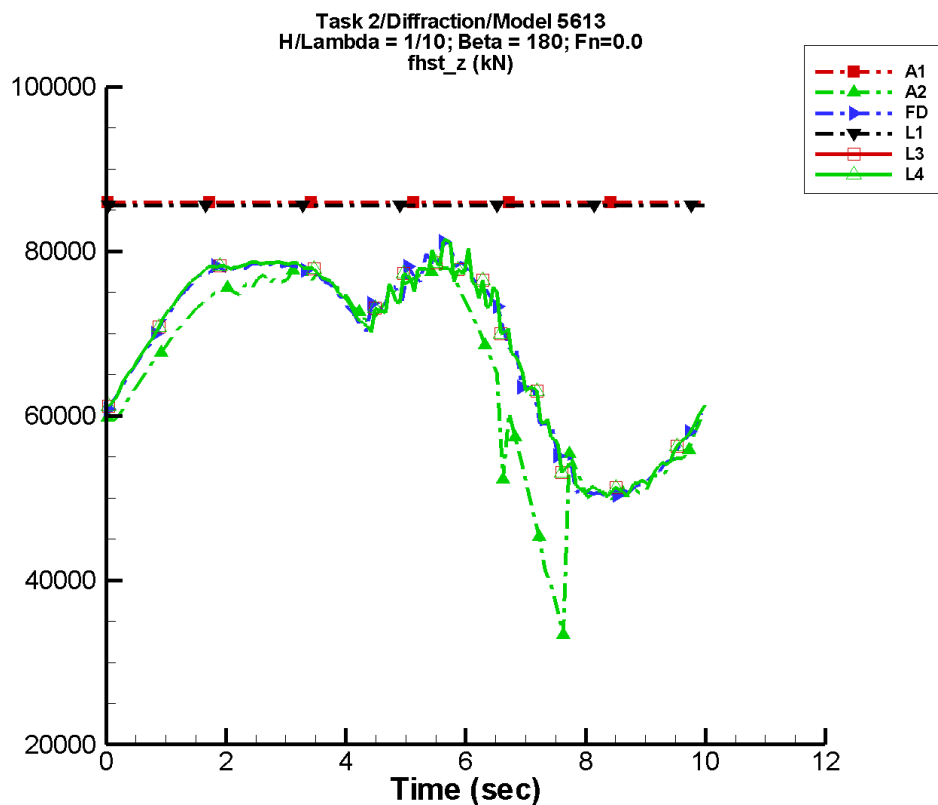
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-4.39E-06	1.78E-02	-29	1.20E-05	-56
A2	-4.03	93.8	-91	123.	26
FD	-1.47E-03	1.00E-03	-116	1.26E-03	-118
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1160. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.78E-02	1.78E-02	-1.76E-02	1.76E-02
A2	-7.49E+03	7.47E+03	-1.02E+03	1.02E+03
FD	-1.64E-02	2.26E-02	-6.49E-03	3.61E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 0; Fn=0.3
ffk_y (kN)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–581. Time history of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
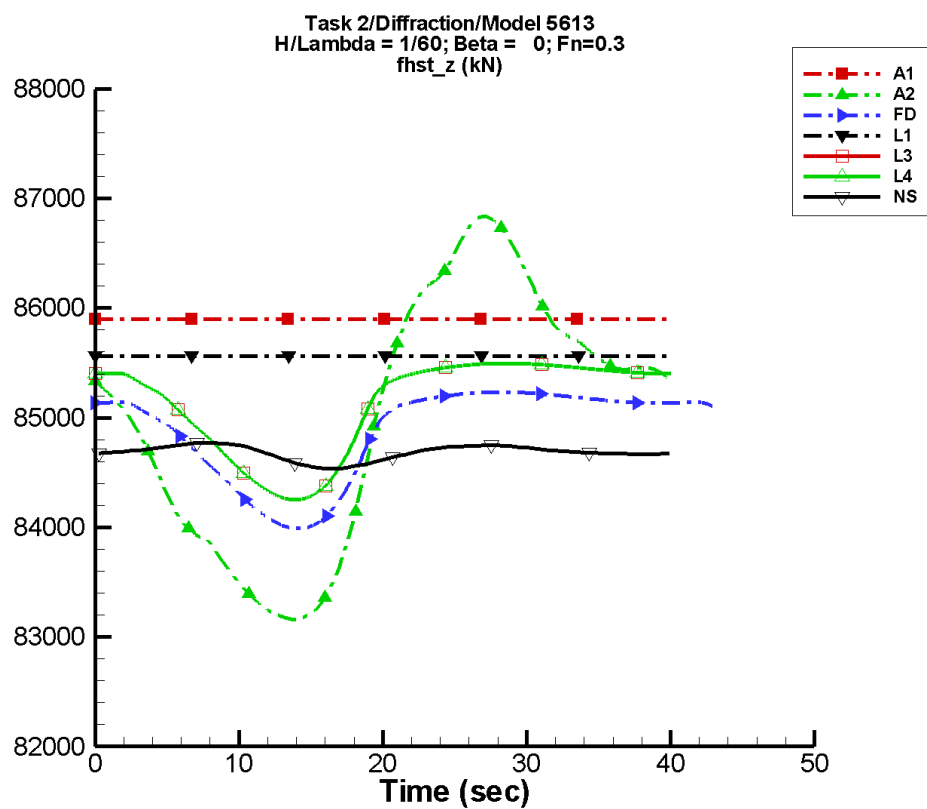
Table G–1161. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-9.46E-08	2.95E-03	24	1.34E-07	-6
A2	1.40E-05	1.05E-05	-48	5.38E-06	111
FD	5.48E-06	4.56E-06	-76	6.26E-06	43
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	7.50E-06	2.05E-04	-144	3.54E-05	-116

Table G–1162. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

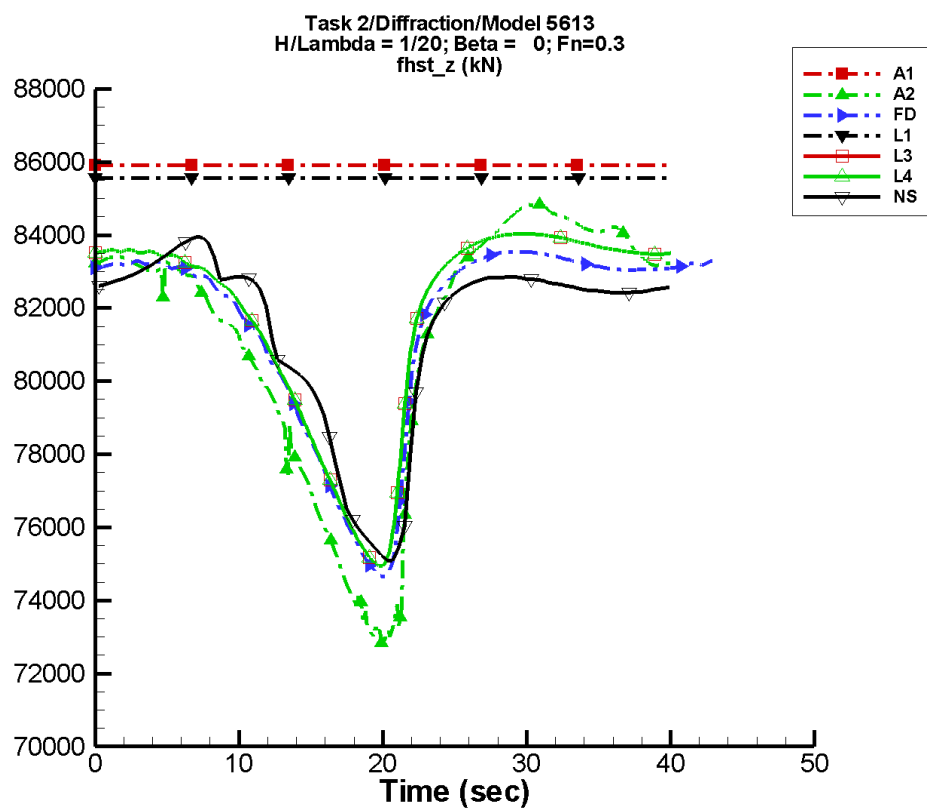| Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.95E-03	2.95E-03	-2.95E-03	2.95E-03
A2	-2.49E-05	8.06E-05	-1.85E-05	5.66E-05
FD	-1.18E-04	1.23E-04	-3.41E-05	3.95E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.10E-03	9.86E-04	-5.05E-04	3.69E-04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.3
ffk_y (kN)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–582. Time history of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
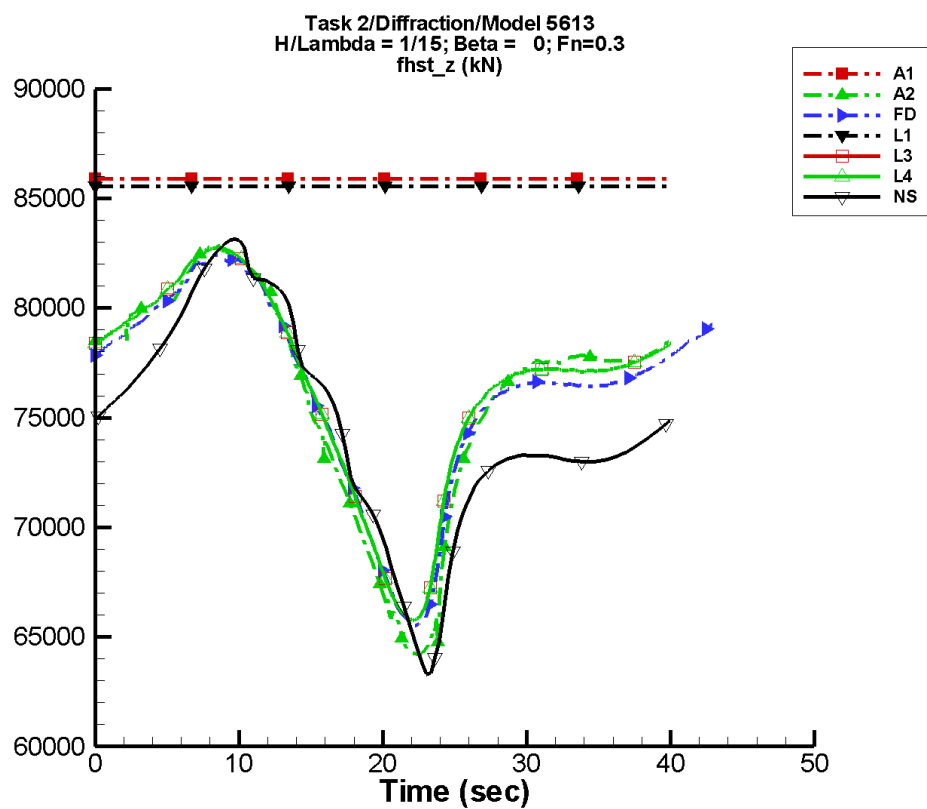
Table G–1163. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-2.83E-07	8.88E-03	24	4.04E-07	-5
A2	-21.8	30.7	163	9.06	19
FD	4.79E-06	4.06E-06	57	2.31E-05	2
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	2.35E-04	3.09E-04	111	4.61E-04	44

Table G–1164. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-8.88E-03	8.88E-03	-8.88E-03	8.88E-03
A2	-3.39E+03	0.240	-747.	58.0
FD	-2.23E-04	1.87E-04	-6.59E-05	6.84E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-3.03E-03	3.13E-03	-7.68E-04	1.56E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–583. Time history of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
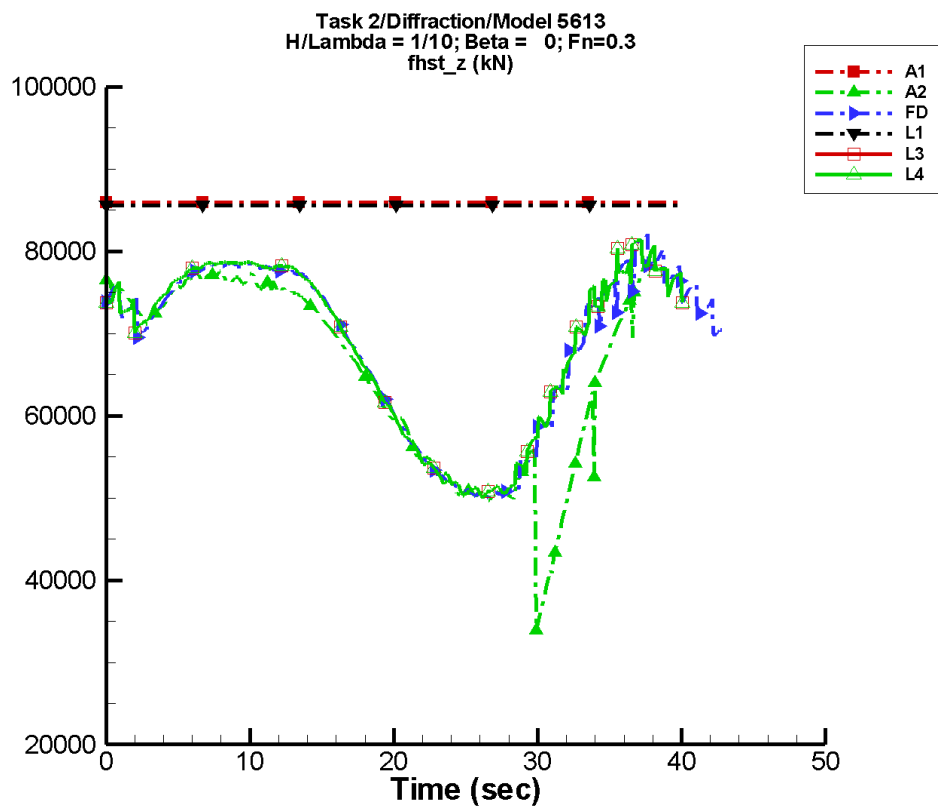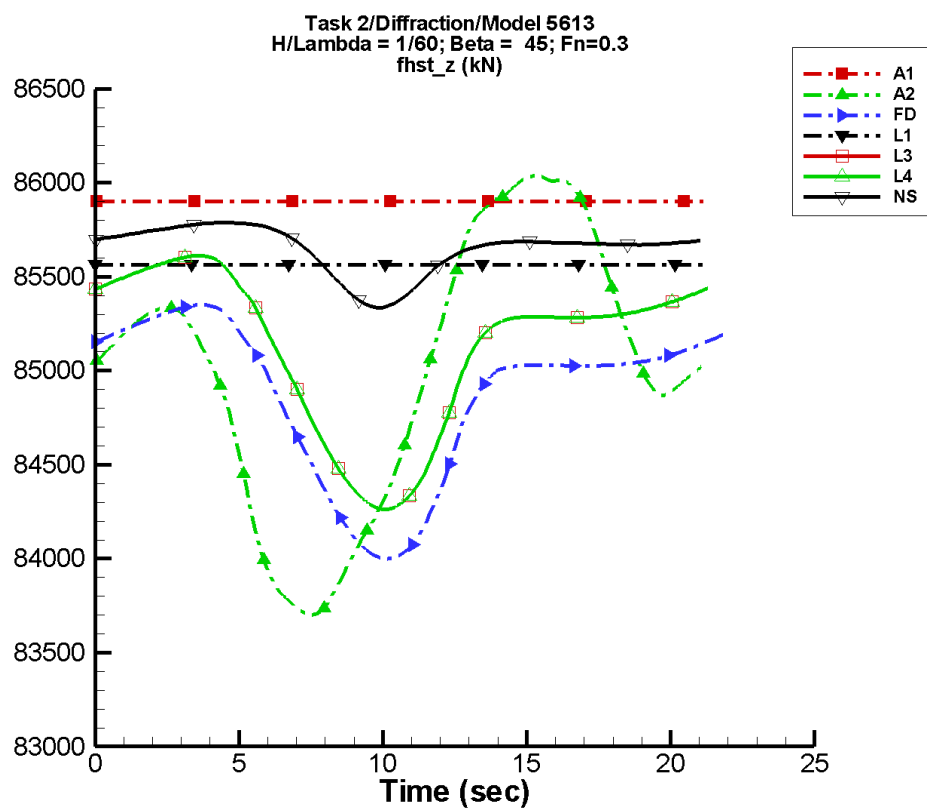
Table G–1165. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-3.80E-07	1.19E-02	24	5.40E-07	-6
A2	-12.6	11.5	97	12.8	-105
FD	-2.90E-06	1.12E-05	-82	2.84E-05	-24
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.51E-05	5.75E-04	-52	4.09E-04	-95

Table G–1166. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.19E-02	1.19E-02	-1.19E-02	1.19E-02
A2	-1.01E+03	6.51E-04	-243.	16.3
FD	-2.48E-04	2.30E-04	-7.44E-05	7.88E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-3.78E-03	5.26E-03	-1.14E-03	1.84E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 0; Fn=0.3
ffk_y (kN)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–584. Time history of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1167. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
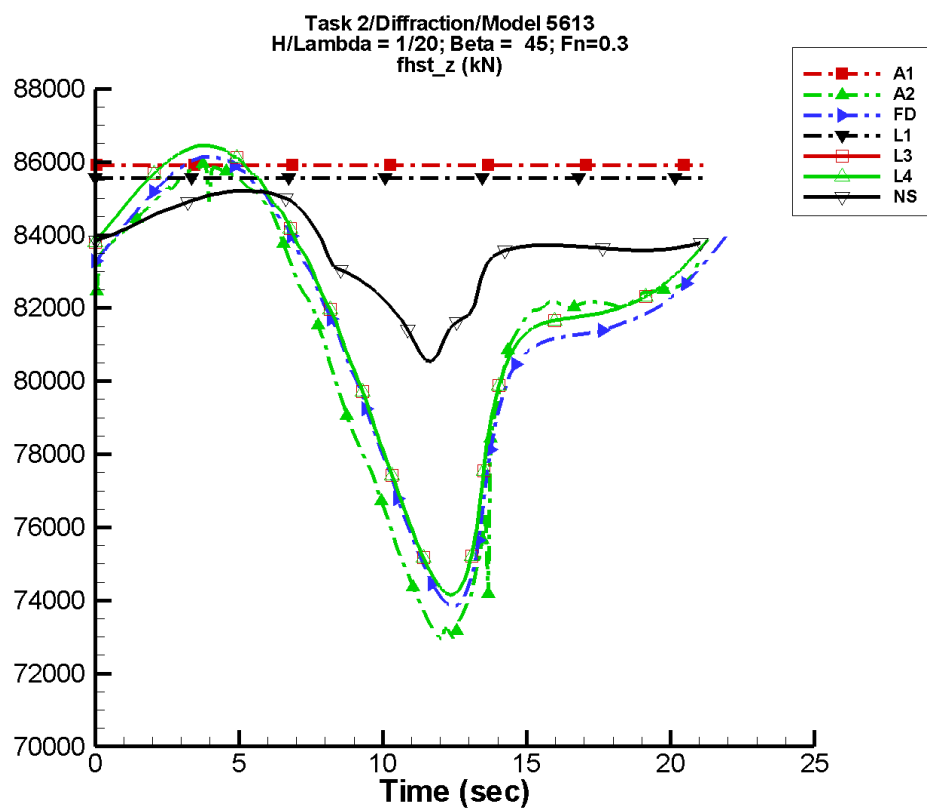
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-5.68E-07	1.78E-02	24	8.10E-07	-6
A2	82.6	147.	137	124.	-171
FD	-2.79E-06	1.55E-05	12	2.64E-05	11
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1168. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.78E-02	1.78E-02	-1.78E-02	1.78E-02
A2	-497.	1.93E+04	-285.	2.59E+03
FD	-2.65E-04	2.72E-04	-9.10E-05	1.13E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–585. Time history of F_y^{ffk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
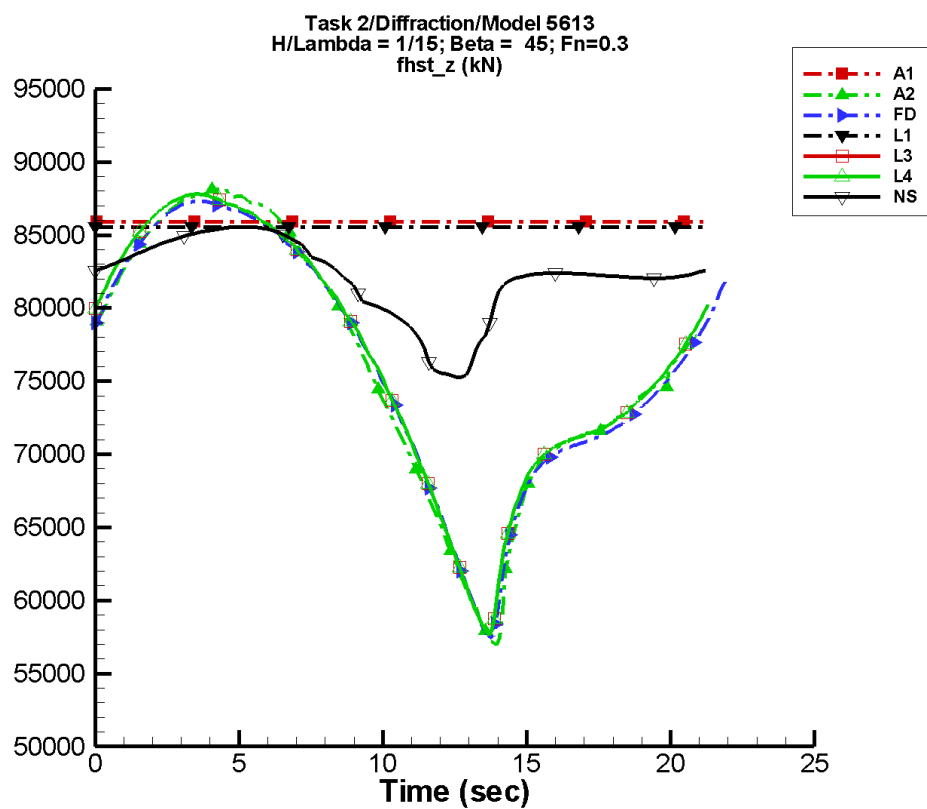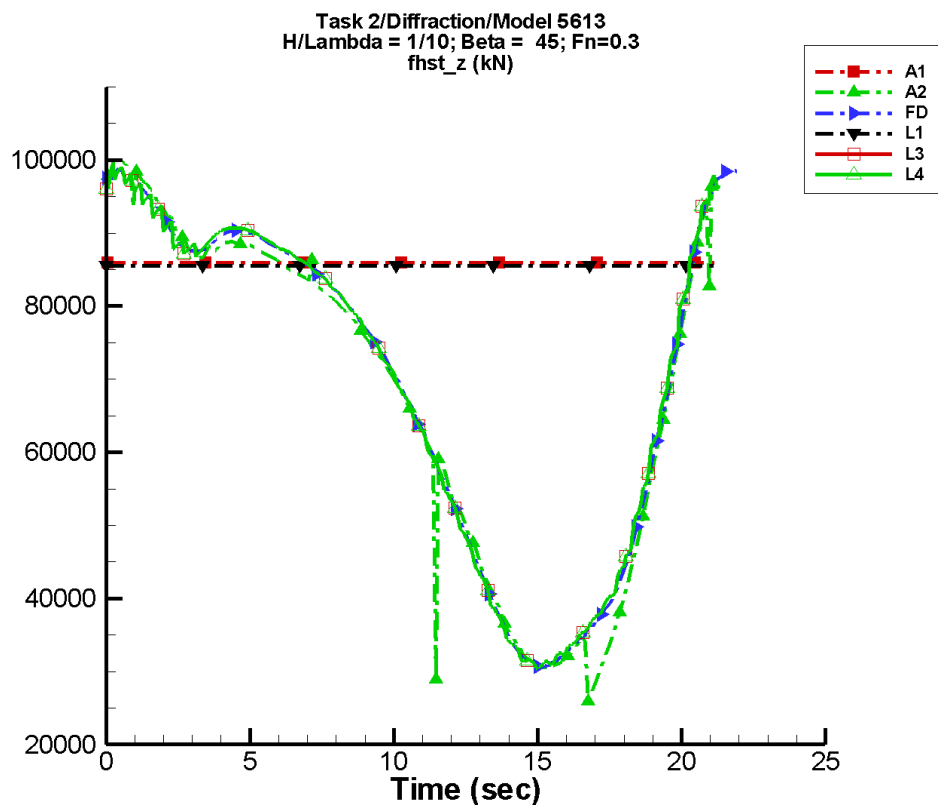
Table G–1169. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.420	1.76E+03	93	0.623	-156
A2	0.114	1.77E+03	94	138.	171
FD	-0.169	1.76E+03	97	77.5	-167
L1	0.228	1.75E+03	93	0.352	-168
L3	0.449	1.74E+03	94	85.9	-172
L4	0.449	1.74E+03	94	85.9	-172
NF	—	—	—	—	—
NS	5.73	1.76E+03	91	67.3	173

Table G–1170. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.76E+03	1.76E+03	-1.76E+03	1.76E+03
A2	-1.76E+03	1.84E+03	-1.76E+03	1.84E+03
FD	-1.74E+03	1.76E+03	-1.74E+03	1.76E+03
L1	-1.75E+03	1.75E+03	-1.75E+03	1.75E+03
L3	-1.73E+03	1.74E+03	-1.73E+03	1.74E+03
L4	-1.73E+03	1.74E+03	-1.73E+03	1.74E+03
NF	—	—	—	—
NS	-1.75E+03	1.78E+03	-1.73E+03	1.77E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 45; Fn=0.3
ffk_y (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–586. Time history of F_y^{ffk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
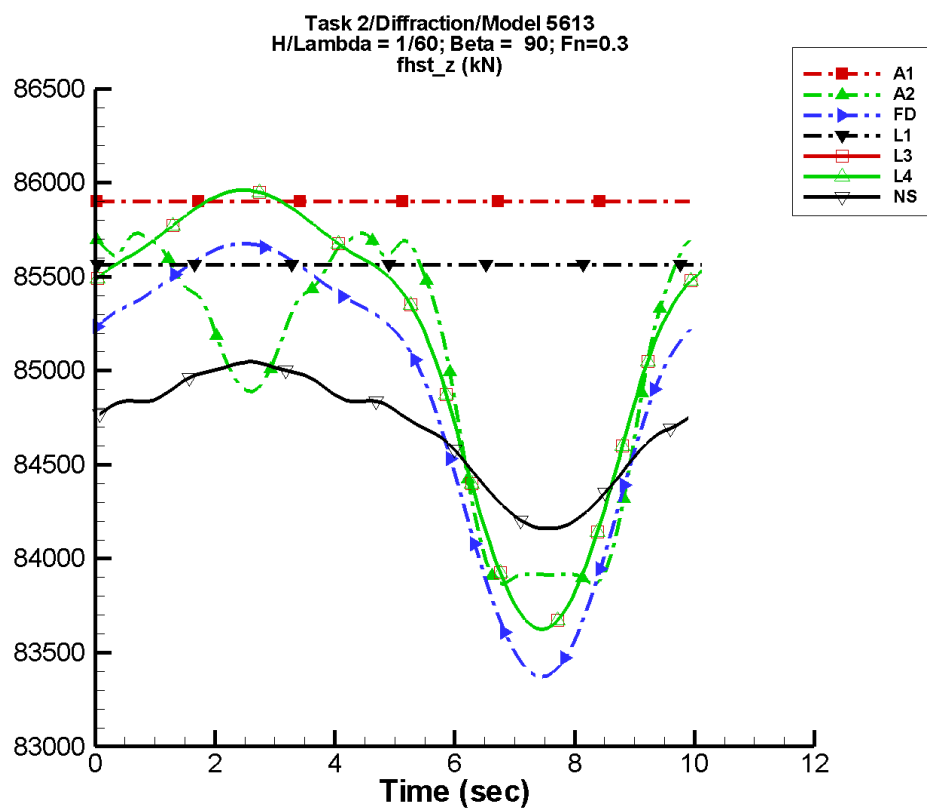
Table G–1171. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.26	5.29E+03	93	1.87	-156
A2	-0.473	5.51E+03	97	340.	158
FD	-1.73	5.45E+03	101	369.	-174
L1	0.684	5.25E+03	93	1.05	-168
L3	1.10	5.01E+03	97	354.	-180
L4	1.10	5.01E+03	97	354.	-180
NF	—	—	—	—	—
NS	54.8	5.16E+03	91	343.	126

Table G–1172. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-5.29E+03	5.29E+03	-5.28E+03	5.29E+03
A2	-5.35E+03	7.62E+03	-5.34E+03	6.13E+03
FD	-5.40E+03	5.69E+03	-5.38E+03	5.67E+03
L1	-5.25E+03	5.25E+03	-5.25E+03	5.25E+03
L3	-4.94E+03	5.18E+03	-4.93E+03	5.18E+03
L4	-4.94E+03	5.18E+03	-4.93E+03	5.18E+03
NF	—	—	—	—
NS	-4.90E+03	5.56E+03	-4.85E+03	5.51E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–587. Time history of F_y^{ffk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1173. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
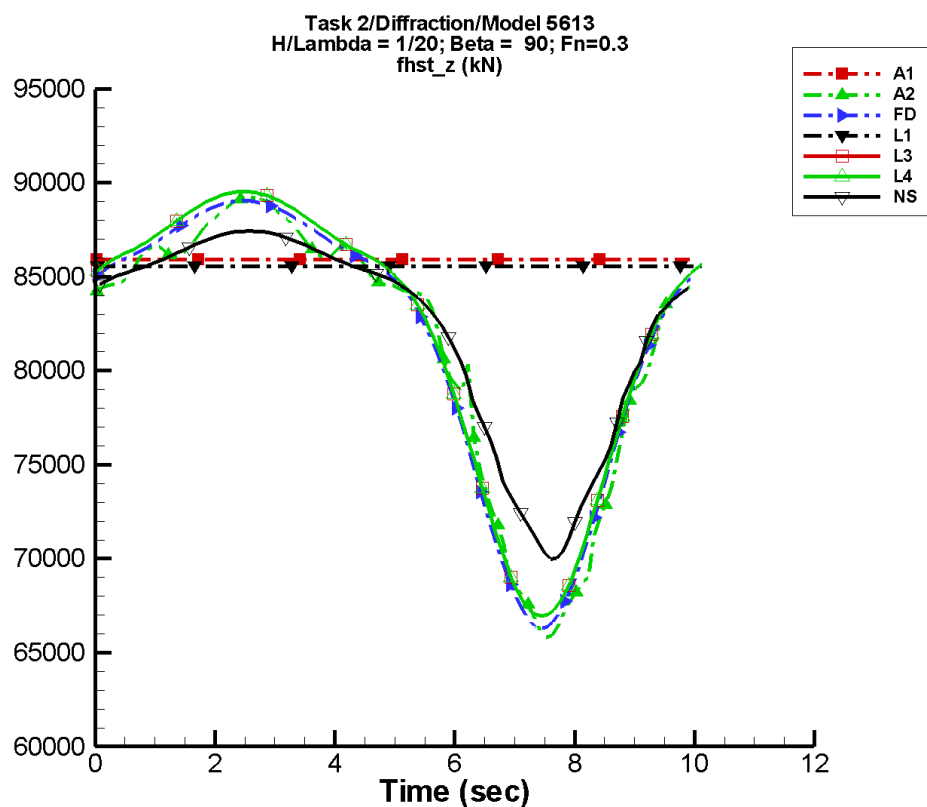
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.69	7.07E+03	93	2.50	-156
A2	-4.62	7.93E+03	99	286.	156
FD	1.12	7.51E+03	103	409.	-167
L1	0.911	7.01E+03	93	1.41	-168
L3	-1.05	6.64E+03	99	343.	-174
L4	-1.05	6.64E+03	99	343.	-174
NF	—	—	—	—	—
NS	86.0	6.72E+03	92	497.	114

Table G–1174. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-7.07E+03	7.07E+03	-7.05E+03	7.07E+03
A2	-8.29E+03	8.52E+03	-8.03E+03	8.47E+03
FD	-7.74E+03	7.92E+03	-7.70E+03	7.89E+03
L1	-7.01E+03	7.01E+03	-7.00E+03	7.00E+03
L3	-6.80E+03	6.91E+03	-6.80E+03	6.90E+03
L4	-6.80E+03	6.91E+03	-6.80E+03	6.90E+03
NF	—	—	—	—
NS	-6.43E+03	7.41E+03	-6.39E+03	7.36E+03

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–588. Time history of F_y^{ffk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
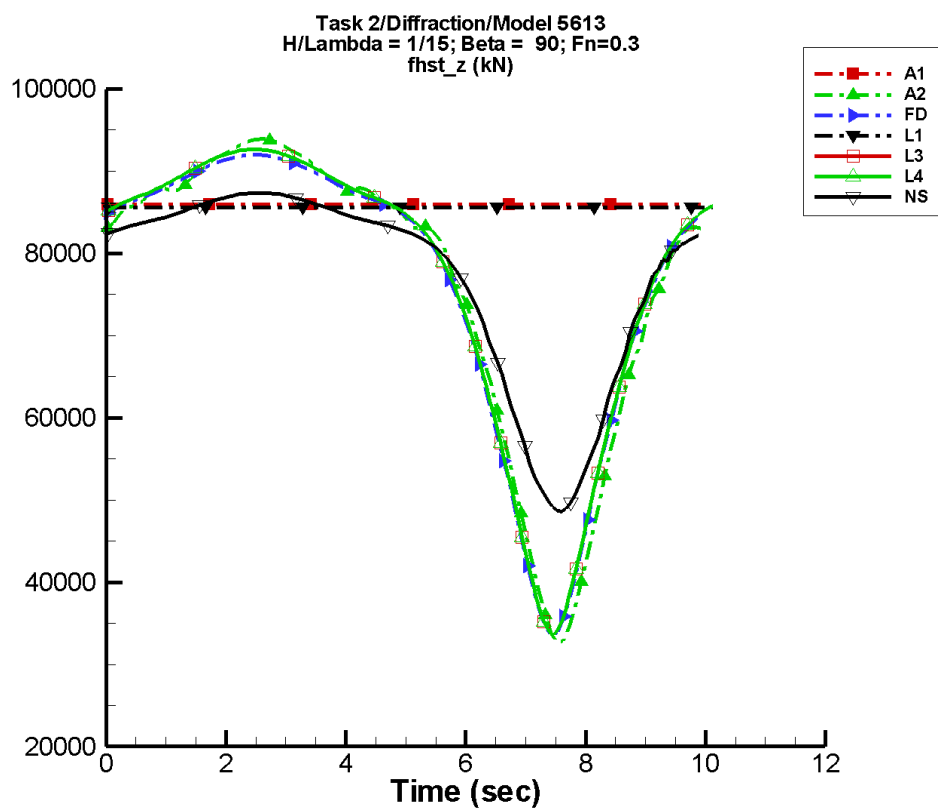
Table G–1175. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	2.53	1.06E+04	93	3.75	-156
A2	309.	1.43E+04	101	964.	145
FD	21.3	1.33E+04	105	782.	-166
L1	1.37	1.05E+04	93	2.11	-168
L3	-2.79	1.11E+04	101	528.	-176
L4	-2.79	1.11E+04	101	528.	-176
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1176. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.06E+04	1.06E+04	-1.06E+04	1.06E+04
A2	-1.49E+04	3.20E+04	-1.51E+04	1.67E+04
FD	-1.40E+04	1.42E+04	-1.39E+04	1.41E+04
L1	-1.05E+04	1.05E+04	-1.05E+04	1.05E+04
L3	-1.16E+04	1.17E+04	-1.15E+04	1.16E+04
L4	-1.16E+04	1.17E+04	-1.15E+04	1.16E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–589. Time history of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
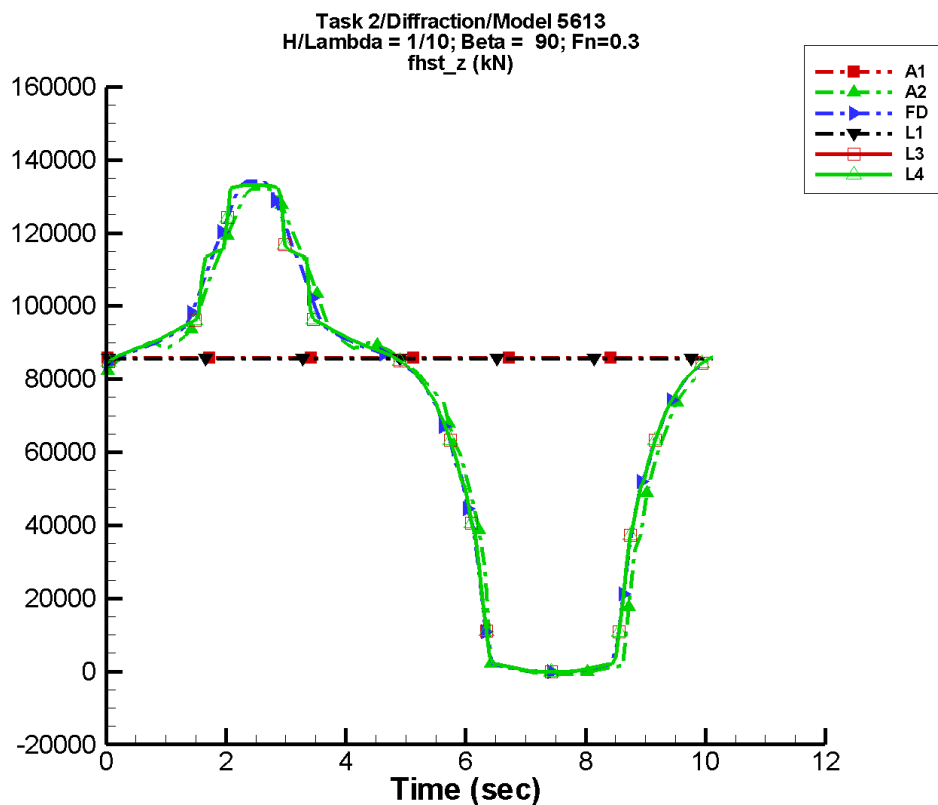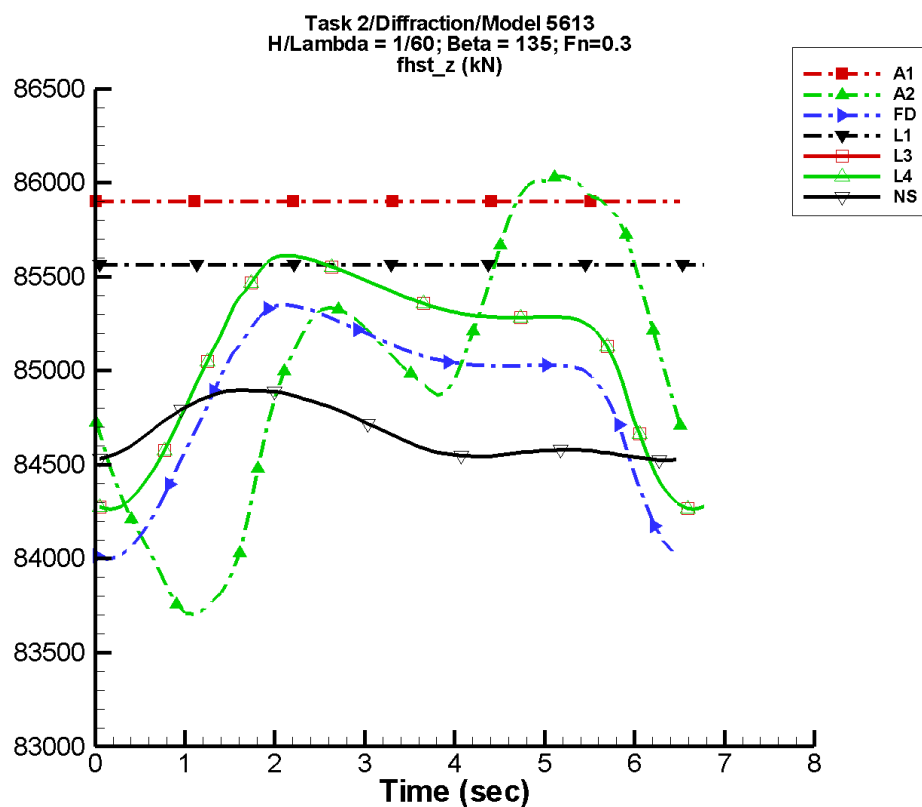
Table G–1177. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-3.24	4.04E+03	86	4.52	24
A2	-2.89	4.09E+03	82	1.28E+03	-15
FD	-2.61	4.07E+03	82	1.34E+03	-15
L1	-1.02	4.02E+03	86	1.63	-29
L3	1.82E-02	4.03E+03	86	1.17E+03	-8
L4	1.82E-02	4.03E+03	86	1.17E+03	-8
NF	—	—	—	—	—
NS	-4.21	3.97E+03	88	1.21E+03	-7

Table G–1178. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-4.04E+03	4.04E+03	-4.00E+03	4.04E+03
A2	-4.78E+03	4.77E+03	-4.68E+03	4.68E+03
FD	-4.72E+03	4.72E+03	-4.63E+03	4.64E+03
L1	-4.02E+03	4.02E+03	-4.01E+03	4.04E+03
L3	-4.56E+03	4.56E+03	-4.53E+03	4.54E+03
L4	-4.56E+03	4.56E+03	-4.53E+03	4.54E+03
NF	—	—	—	—
NS	-4.56E+03	4.47E+03	-4.48E+03	4.40E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.3
ffk_y (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–590. Time history of F_y^{ffk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
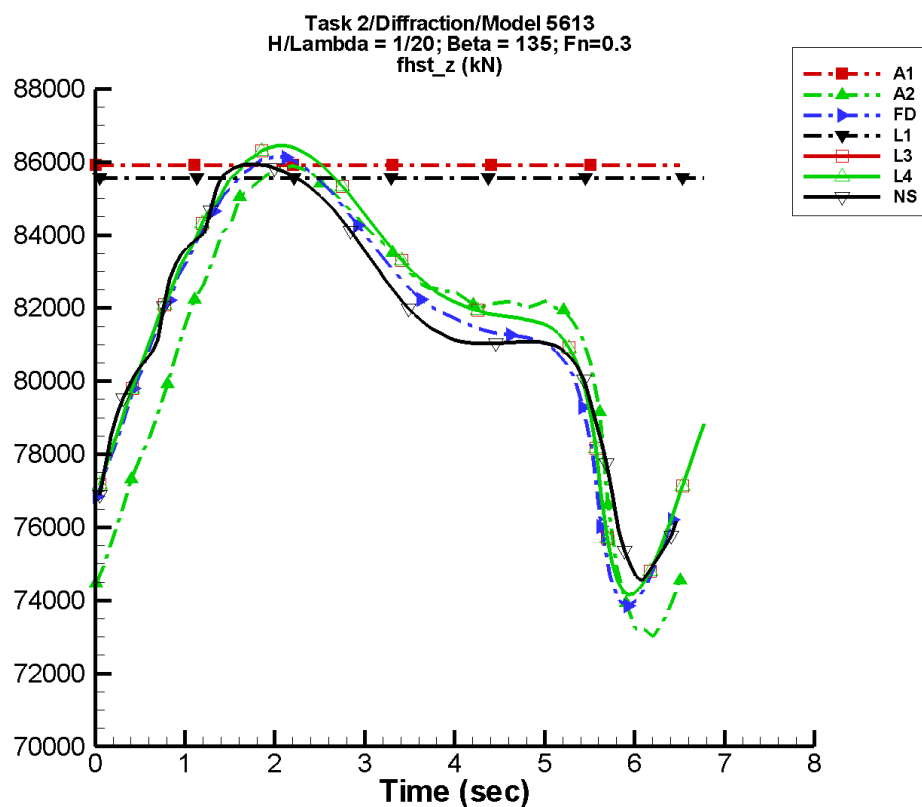
Table G–1179. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-9.75	1.21E+04	86	13.6	24
A2	44.4	1.34E+04	82	1.17E+04	-17
FD	-33.8	1.33E+04	82	1.08E+04	-15
L1	-3.07	1.21E+04	86	4.89	-29
L3	12.4	1.22E+04	86	9.46E+03	-8
L4	12.4	1.22E+04	86	9.46E+03	-8
NF	—	—	—	—	—
NS	18.1	1.20E+04	88	1.01E+04	-7

Table G–1180. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.21E+04	1.21E+04	-1.20E+04	1.21E+04
A2	-2.24E+04	2.24E+04	-2.18E+04	2.18E+04
FD	-2.15E+04	2.15E+04	-2.09E+04	2.09E+04
L1	-1.21E+04	1.21E+04	-1.20E+04	1.21E+04
L3	-1.91E+04	1.91E+04	-1.89E+04	1.89E+04
L4	-1.91E+04	1.91E+04	-1.89E+04	1.89E+04
NF	—	—	—	—
NS	-1.98E+04	1.95E+04	-1.93E+04	1.90E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–591. Time history of F_y^{ffk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
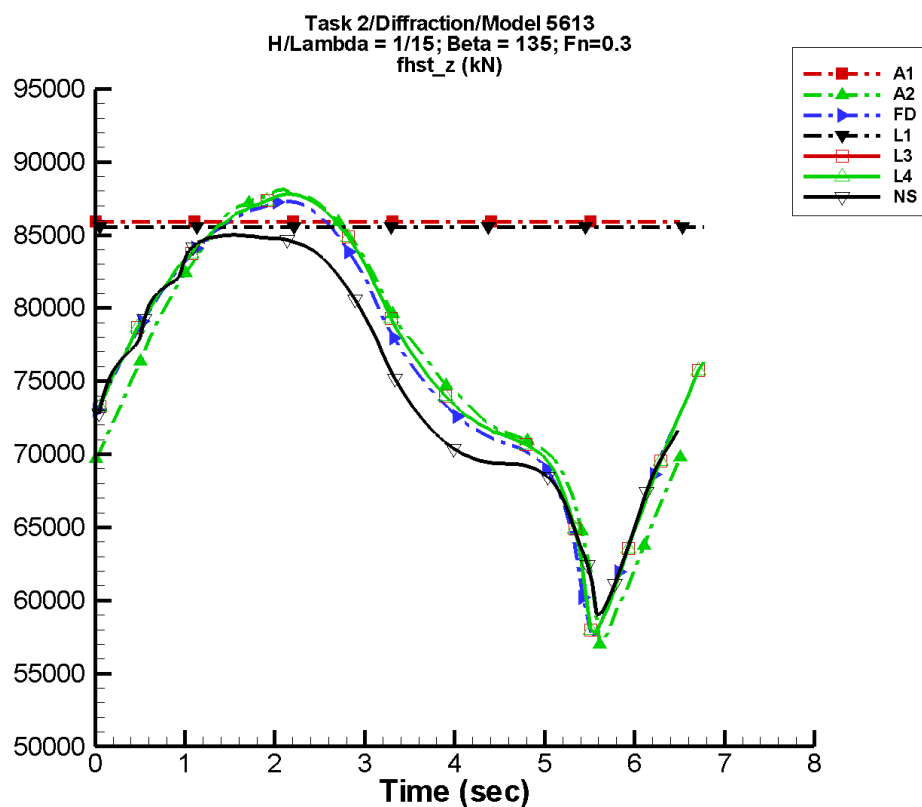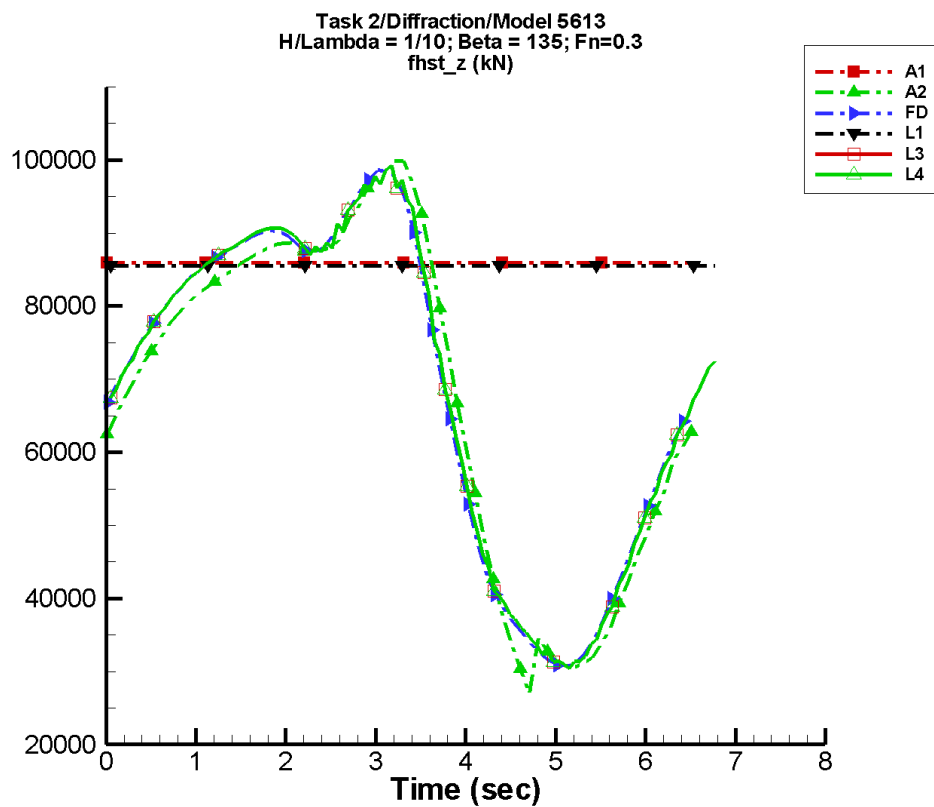
Table G–1181. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-13.0	1.62E+04	86	18.2	24
A2	0.190	1.96E+04	81	2.00E+04	-17
FD	-74.3	1.88E+04	82	1.84E+04	-15
L1	-4.09	1.61E+04	86	6.53	-29
L3	30.4	1.66E+04	86	1.57E+04	-8
L4	30.4	1.66E+04	86	1.57E+04	-8
NF	—	—	—	—	—
NS	80.7	1.57E+04	88	1.64E+04	-6

Table G–1182. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.62E+04	1.62E+04	-1.60E+04	1.62E+04
A2	-3.63E+04	3.64E+04	-3.50E+04	3.52E+04
FD	-3.36E+04	3.36E+04	-3.26E+04	3.27E+04
L1	-1.61E+04	1.61E+04	-1.60E+04	1.62E+04
L3	-2.89E+04	2.89E+04	-2.86E+04	2.86E+04
L4	-2.89E+04	2.89E+04	-2.86E+04	2.86E+04
NF	—	—	—	—
NS	-2.92E+04	2.88E+04	-2.87E+04	2.83E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.3
ffk_y (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–592. Time history of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
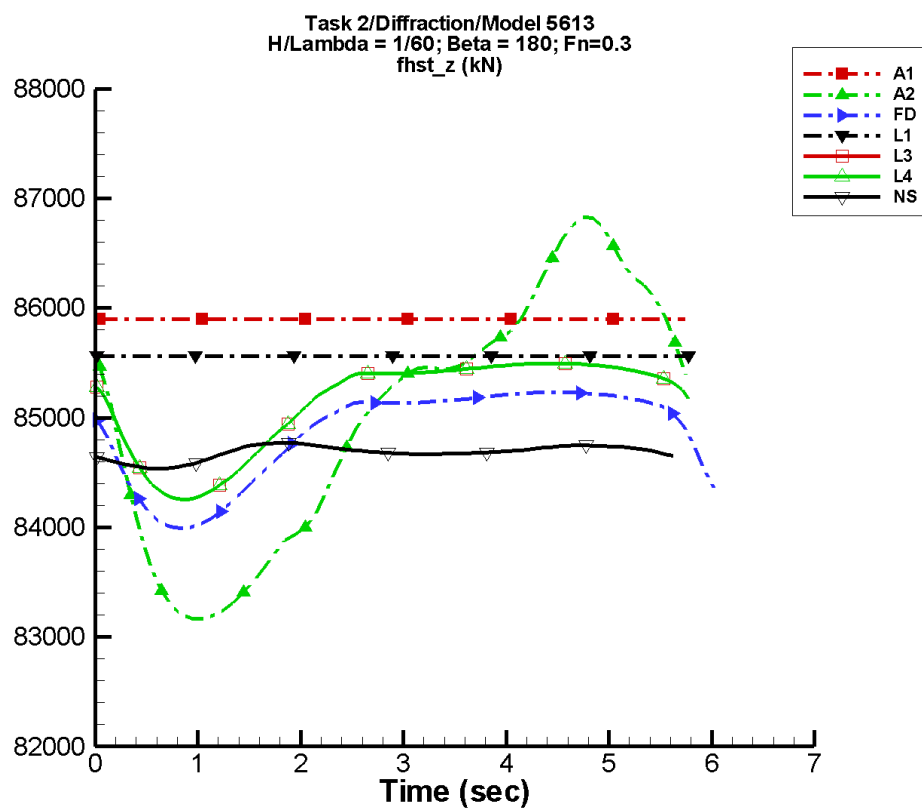
Table G–1183. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-19.5	2.43E+04	86	27.2	24
A2	86.4	3.63E+04	81	3.87E+04	-17
FD	-284.	3.36E+04	81	3.50E+04	-13
L1	-6.13	2.41E+04	86	9.79	-29
L3	152.	2.80E+04	86	2.79E+04	-8
L4	152.	2.80E+04	86	2.79E+04	-8
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1184. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.43E+04	2.43E+04	-2.41E+04	2.43E+04
A2	-7.21E+04	7.20E+04	-6.94E+04	6.94E+04
FD	-6.49E+04	6.49E+04	-6.27E+04	6.28E+04
L1	-2.41E+04	2.41E+04	-2.41E+04	2.42E+04
L3	-5.24E+04	5.24E+04	-5.18E+04	5.18E+04
L4	-5.24E+04	5.24E+04	-5.18E+04	5.18E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–593. Time history of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

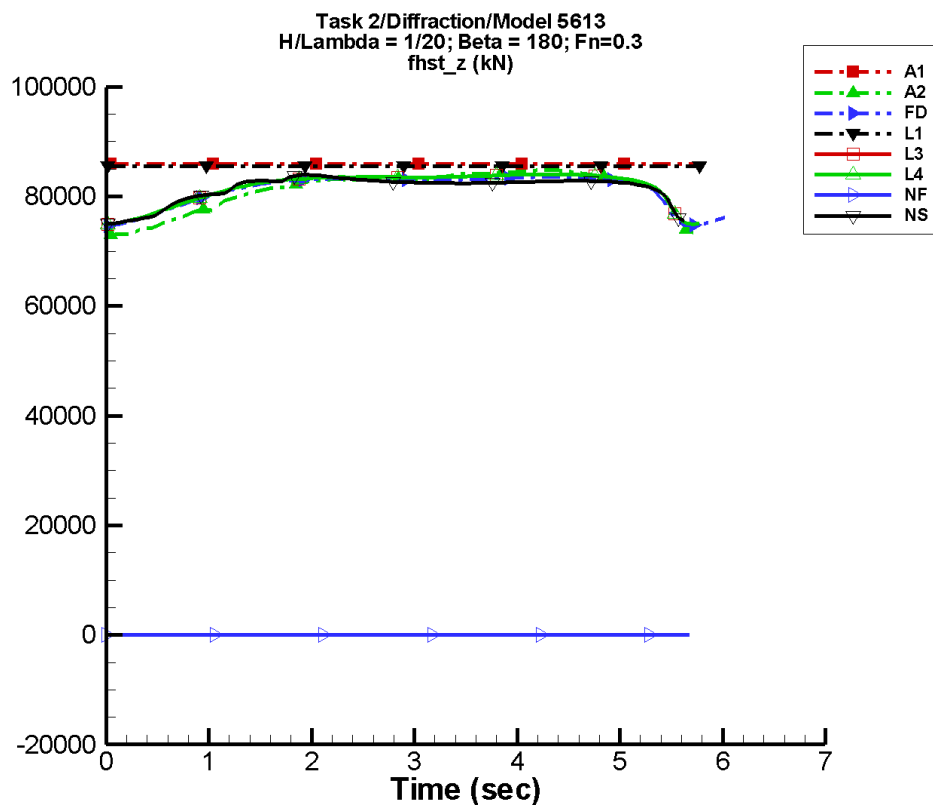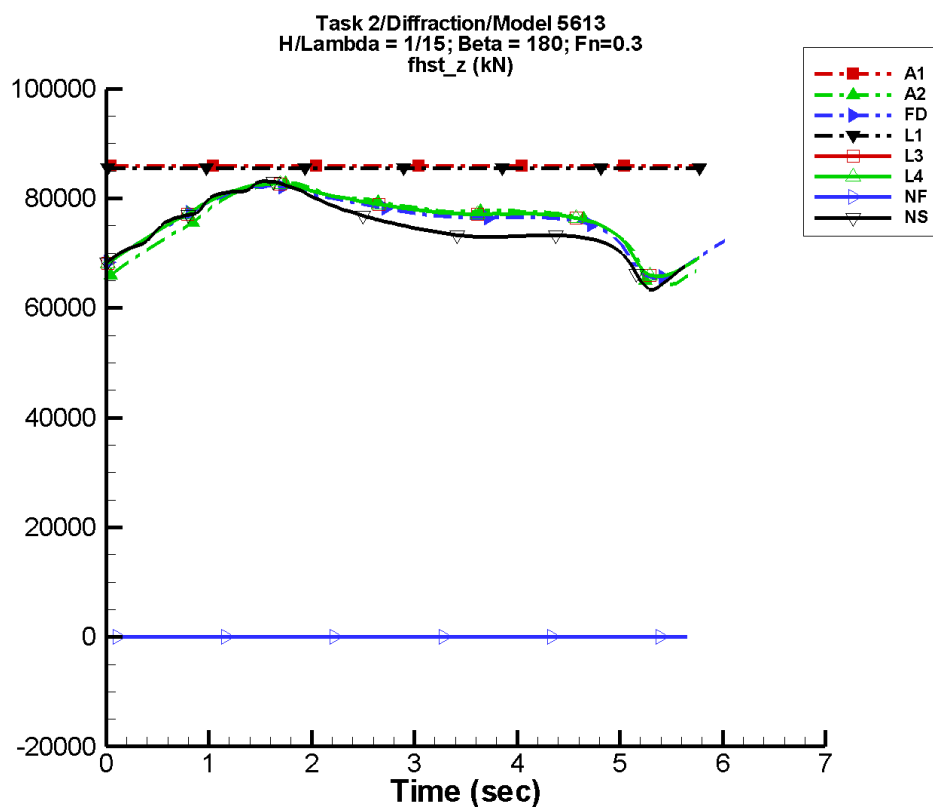Table G–1185. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-0.683	1.76E+03	85	1.05	-1
A2	-0.898	1.77E+03	78	134.	170
FD	0.597	1.76E+03	89	76.7	-178
L1	-8.81E-02	1.75E+03	84	0.142	-63
L3	-0.506	1.74E+03	84	82.9	168
L4	-0.506	1.74E+03	84	82.9	168
NF	—	—	—	—	—
NS	-5.70	1.78E+03	87	54.1	-141

Table G–1186. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.76E+03	1.76E+03	-1.72E+03	1.77E+03
A2	-1.84E+03	1.76E+03	-1.79E+03	1.76E+03
FD	-1.76E+03	1.74E+03	-1.72E+03	1.72E+03
L1	-1.75E+03	1.75E+03	-1.74E+03	1.76E+03
L3	-1.74E+03	1.73E+03	-1.73E+03	1.73E+03
L4	-1.74E+03	1.73E+03	-1.73E+03	1.73E+03
NF	—	—	—	—
NS	-1.83E+03	1.74E+03	-1.81E+03	1.74E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–594. Time history of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
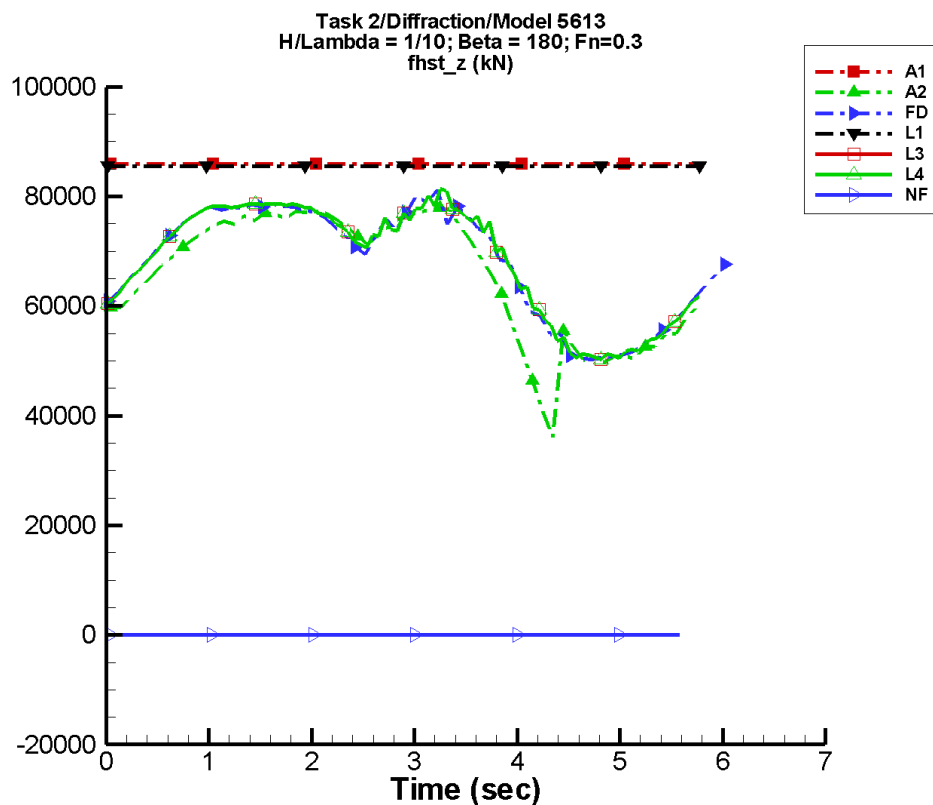
Table G–1187. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-2.06	5.29E+03	85	3.15	-1
A2	-2.60	5.57E+03	74	352.	-172
FD	13.1	5.49E+03	86	340.	-168
L1	-0.266	5.25E+03	84	0.426	-63
L3	3.32	5.05E+03	81	316.	176
L4	3.32	5.05E+03	81	316.	176
NF	—	—	—	—	—
NS	-11.3	5.35E+03	85	304.	-109

Table G–1188. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-5.29E+03	5.29E+03	-5.17E+03	5.31E+03
A2	-6.20E+03	5.34E+03	-5.68E+03	5.30E+03
FD	-5.69E+03	5.40E+03	-5.53E+03	5.39E+03
L1	-5.25E+03	5.25E+03	-5.21E+03	5.29E+03
L3	-5.18E+03	4.94E+03	-5.14E+03	4.98E+03
L4	-5.18E+03	4.94E+03	-5.14E+03	4.98E+03
NF	—	—	—	—
NS	-5.79E+03	5.16E+03	-5.71E+03	5.16E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–595. Time history of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
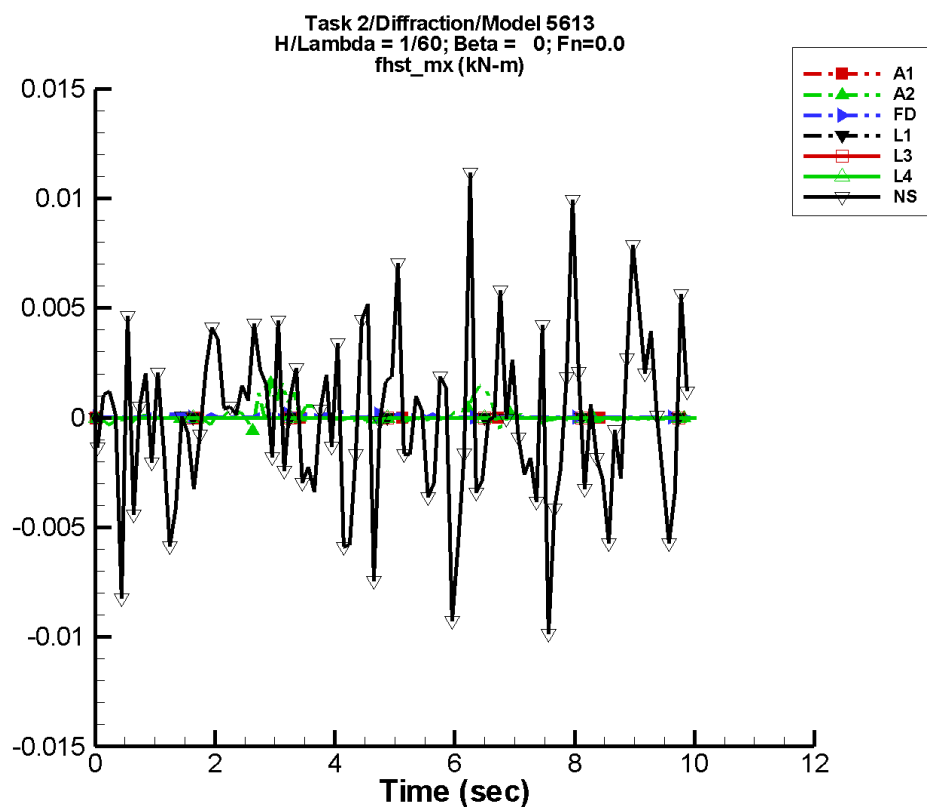
Table G–1189. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-2.74	7.07E+03	85	4.20	-1
A2	-3.00	8.02E+03	73	240.	-160
FD	23.3	7.59E+03	84	336.	-177
L1	-0.353	7.00E+03	84	0.569	-63
L3	11.6	6.69E+03	79	300.	163
L4	11.6	6.69E+03	79	300.	163
NF	—	—	—	—	—
NS	11.2	7.28E+03	89	818.	-49

Table G–1190. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
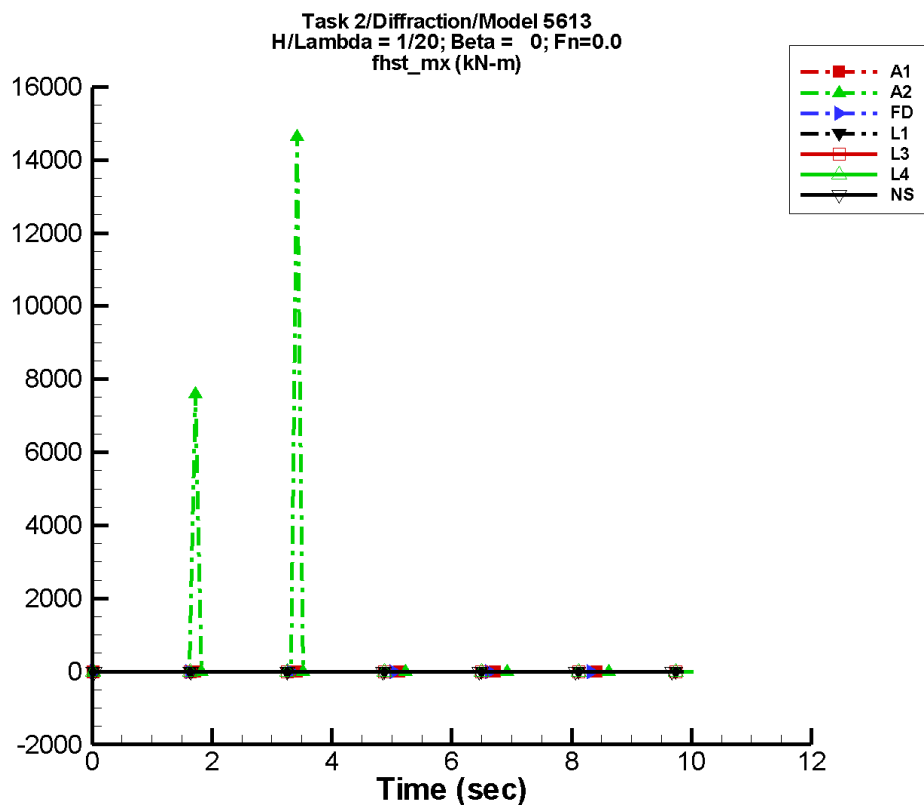
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-7.06E+03	7.07E+03	-6.90E+03	7.09E+03
A2	-8.48E+03	8.04E+03	-8.23E+03	7.80E+03
FD	-7.91E+03	7.74E+03	-7.68E+03	7.70E+03
L1	-7.01E+03	7.01E+03	-6.95E+03	7.06E+03
L3	-6.91E+03	6.80E+03	-6.84E+03	6.83E+03
L4	-6.91E+03	6.80E+03	-6.84E+03	6.83E+03
NF	—	—	—	—
NS	-8.32E+03	7.23E+03	-8.24E+03	7.24E+03

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–596. Time history of F_y^{ffk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
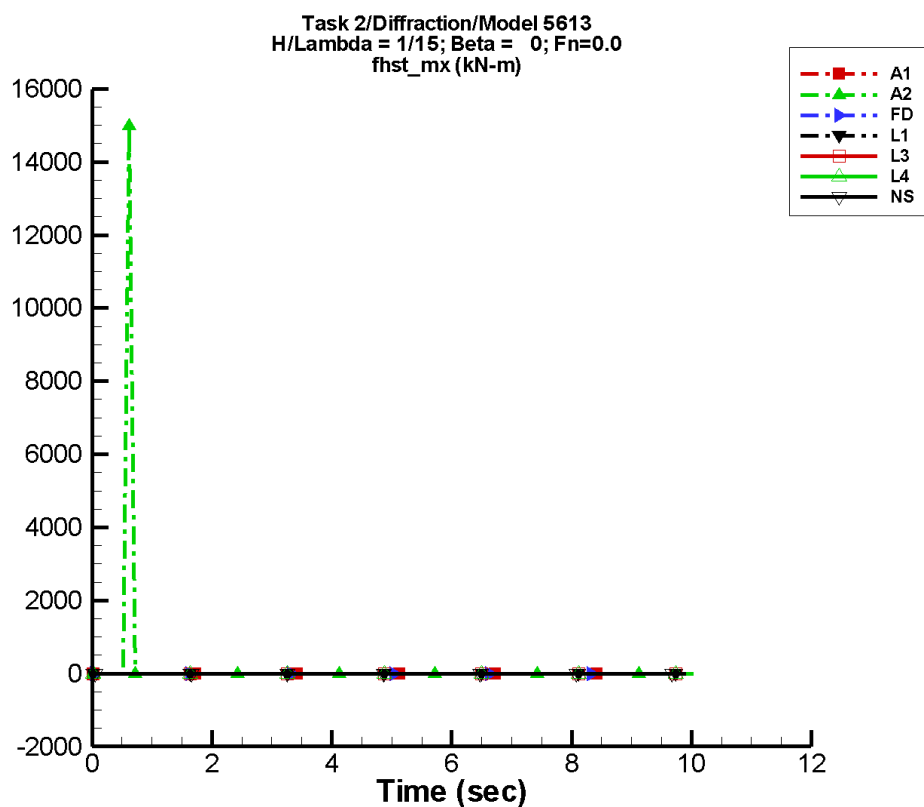
Table G–1191. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-4.12	1.06E+04	85	6.30	-1
A2	20.2	1.45E+04	71	852.	157
FD	32.0	1.35E+04	82	644.	174
L1	-0.532	1.05E+04	84	0.853	-63
L3	33.6	1.12E+04	76	537.	158
L4	33.6	1.12E+04	76	537.	158
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1192. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.06E+04	1.06E+04	-1.03E+04	1.06E+04
A2	-1.58E+04	1.49E+04	-1.50E+04	1.45E+04
FD	-1.42E+04	1.40E+04	-1.37E+04	1.39E+04
L1	-1.05E+04	1.05E+04	-1.04E+04	1.06E+04
L3	-1.16E+04	1.16E+04	-1.14E+04	1.16E+04
L4	-1.16E+04	1.16E+04	-1.14E+04	1.16E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–597. Time history of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
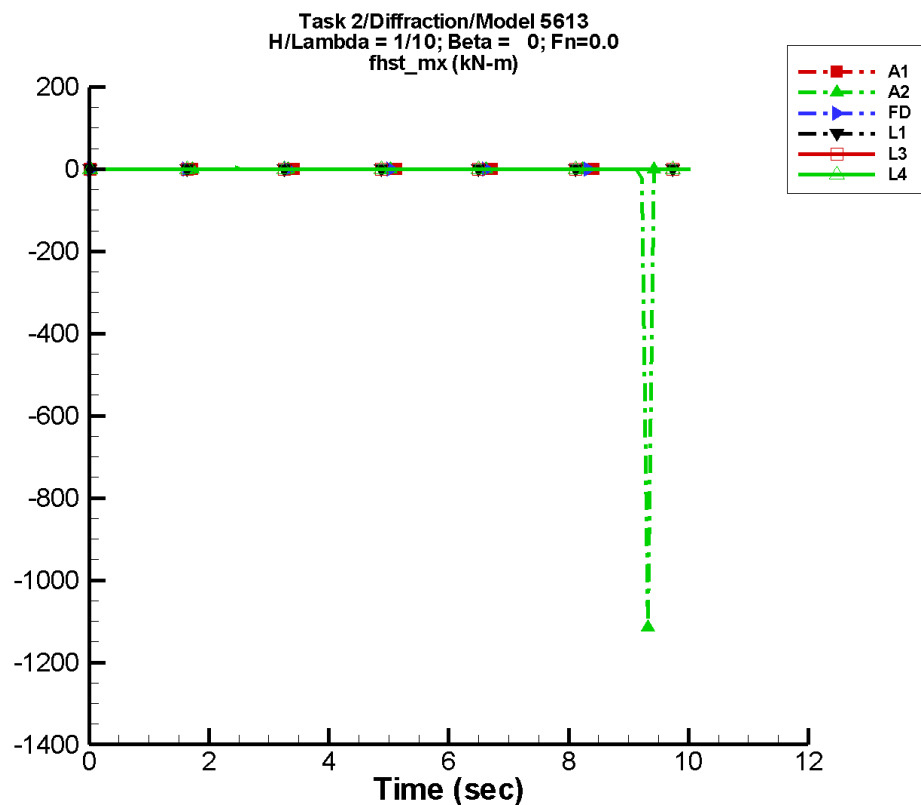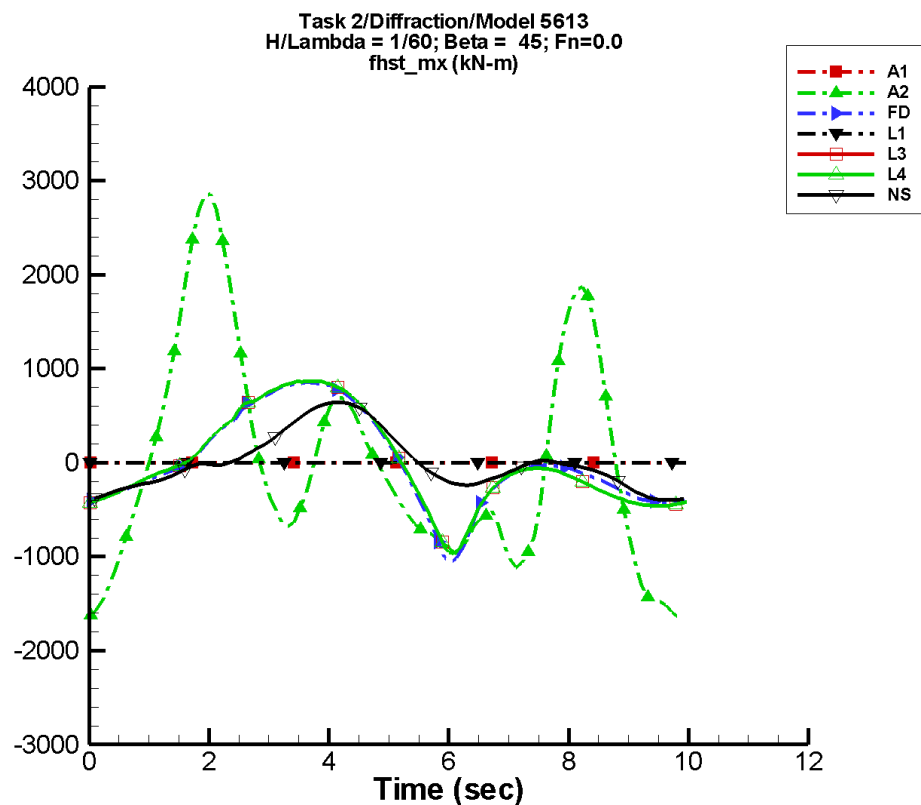
Table G–1193. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.90E-06	2.95E-03	-32	2.99E-06	-45
A2	1.48E-05	1.21E-05	9	4.79E-06	47
FD	-1.74E-04	5.41E-04	2	5.71E-04	20
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	4.62E-05	2.18E-04	106	9.40E-05	-42

Table G–1194. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.95E-03	2.95E-03	-2.86E-03	2.89E-03
A2	-2.12E-05	7.82E-05	-6.69E-06	3.28E-05
FD	-2.90E-03	2.46E-03	-1.11E-03	1.29E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.39E-03	2.20E-03	-3.96E-04	5.09E-04

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–598. Time history of F_y^{ffk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1195. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
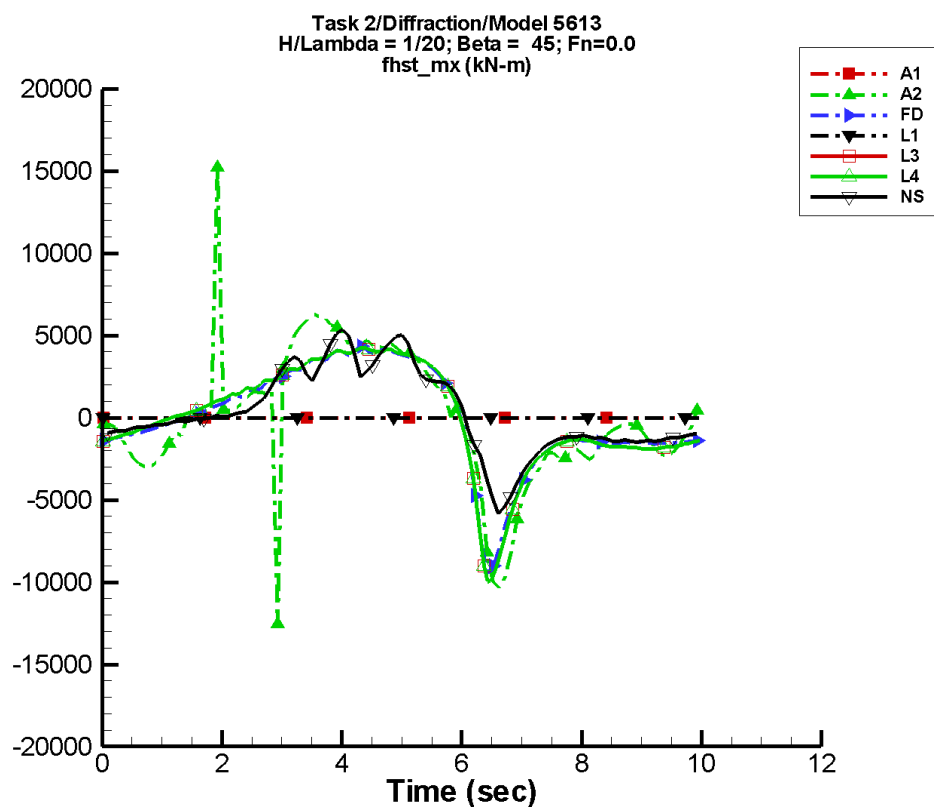
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-5.70E-06	8.88E-03	-32	9.00E-06	-45
A2	-9.14	20.5	-166	26.1	120
FD	-1.88E-04	2.71E-03	31	2.62E-04	-45
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	8.19E-05	1.53E-04	-108	2.88E-04	132

Table G–1196. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-8.88E-03	8.87E-03	-8.61E-03	8.68E-03
A2	-1.17E+03	2.99E-04	-156.	13.4
FD	-1.54E-02	1.10E-02	-4.27E-03	3.78E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-5.40E-03	3.86E-03	-8.45E-04	9.57E-04

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–599. Time history of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
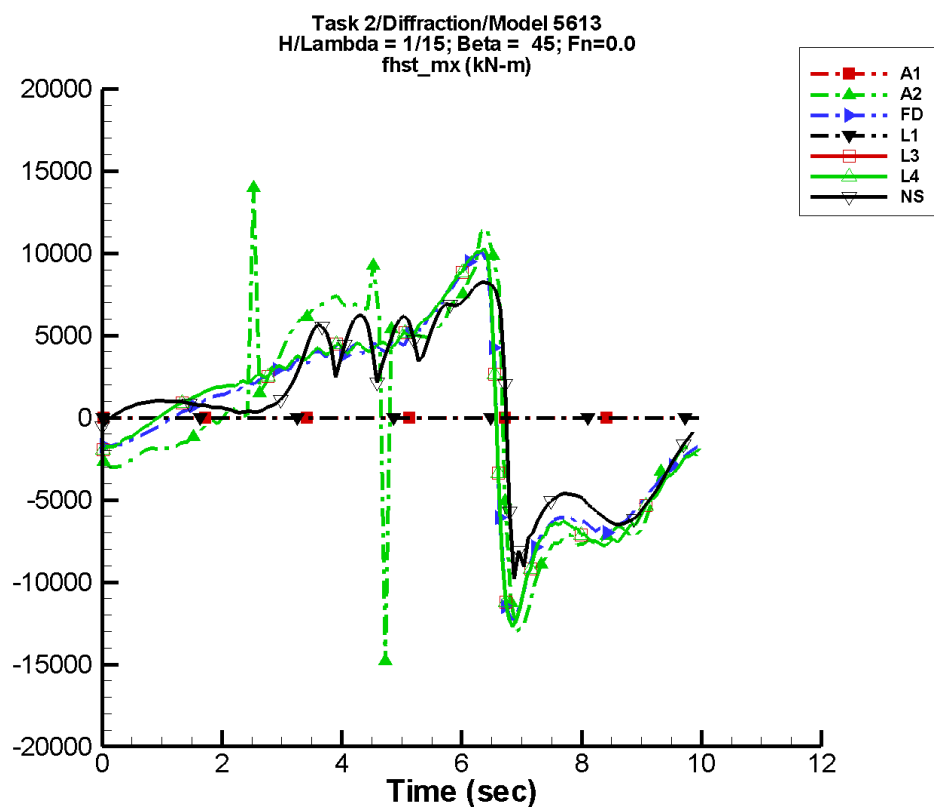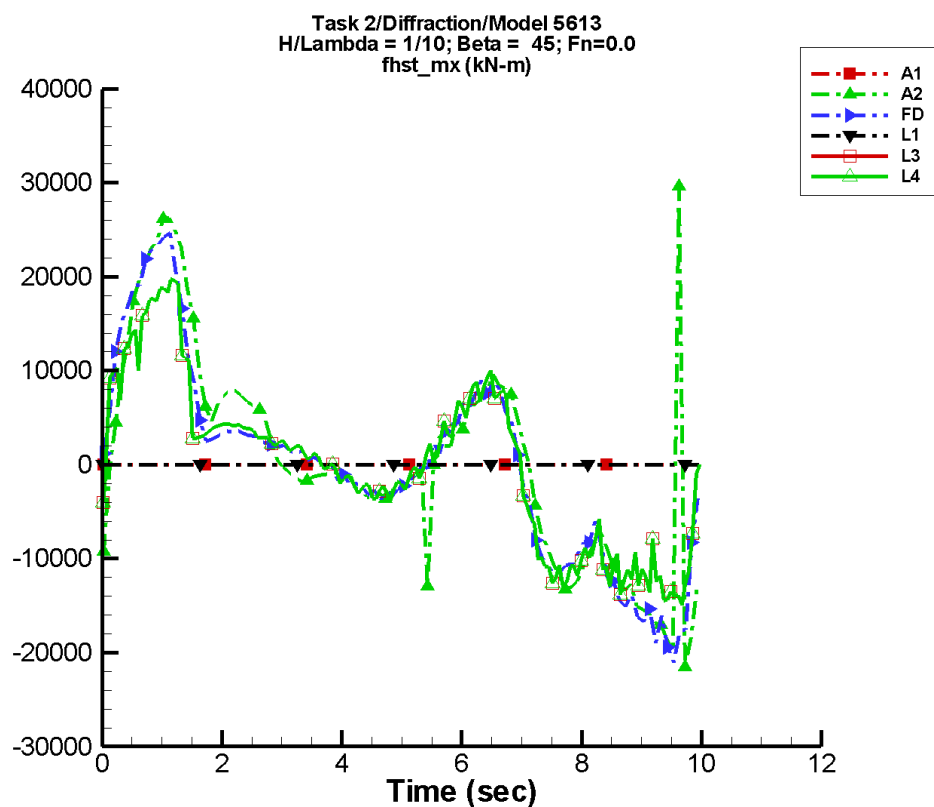
Table G–1197. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-7.61E-06	1.19E-02	-32	1.20E-05	-45
A2	-7.72	14.0	-74	14.3	-46
FD	-4.15E-04	3.24E-03	51	2.44E-03	2
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.51E-05	5.30E-04	82	5.30E-04	-75

Table G–1198. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.19E-02	1.18E-02	-1.15E-02	1.16E-02
A2	-407.	6.12E-04	-54.3	4.63
FD	-2.23E-02	1.74E-02	-3.71E-03	4.82E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.03E-02	9.74E-03	-1.50E-03	4.03E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 180; Fn=0.3
ffk_y (kN)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–600. Time history of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
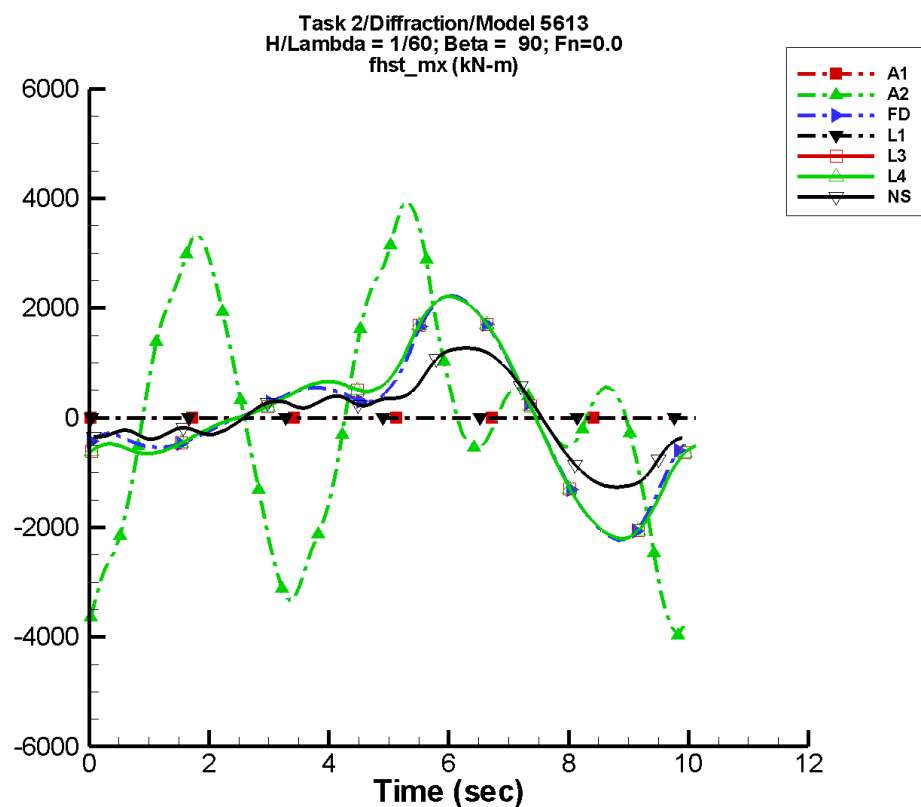
Table G–1199. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.14E-05	1.78E-02	-32	1.80E-05	-45
A2	-8.23	18.2	58	16.5	-167
FD	1.65E-03	7.29E-03	49	8.70E-03	82
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1200. Minimum and maximum of of F_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.78E-02	1.78E-02	-1.72E-02	1.74E-02
A2	-525.	55.2	-69.9	12.3
FD	-4.43E-02	4.18E-02	-1.53E-02	2.13E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–601. Time history of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
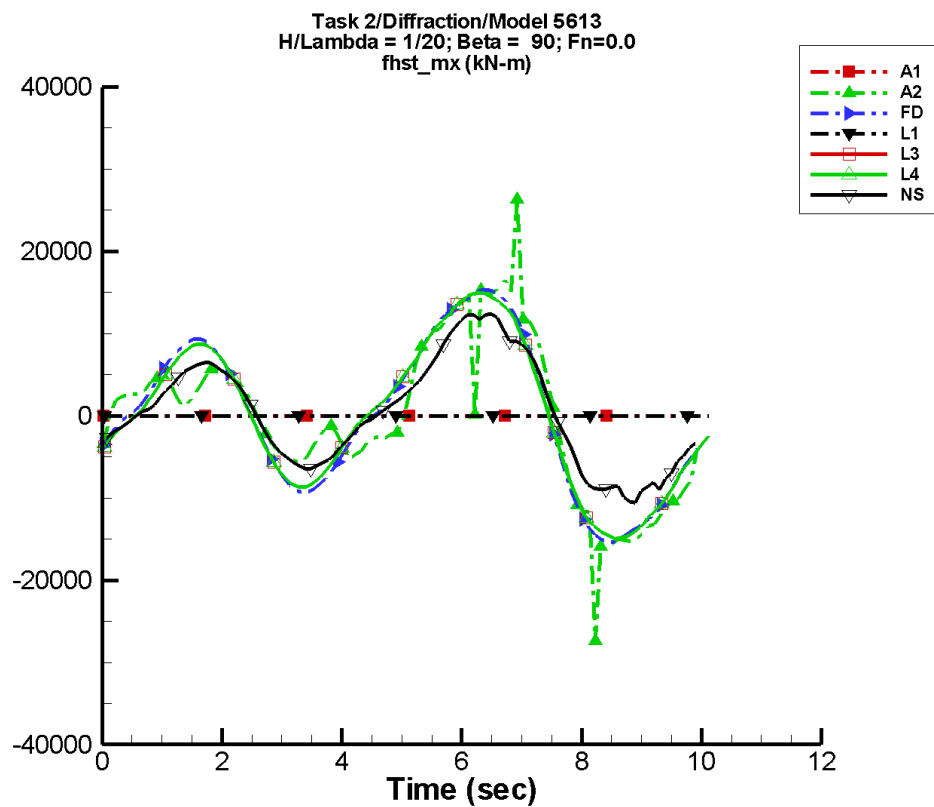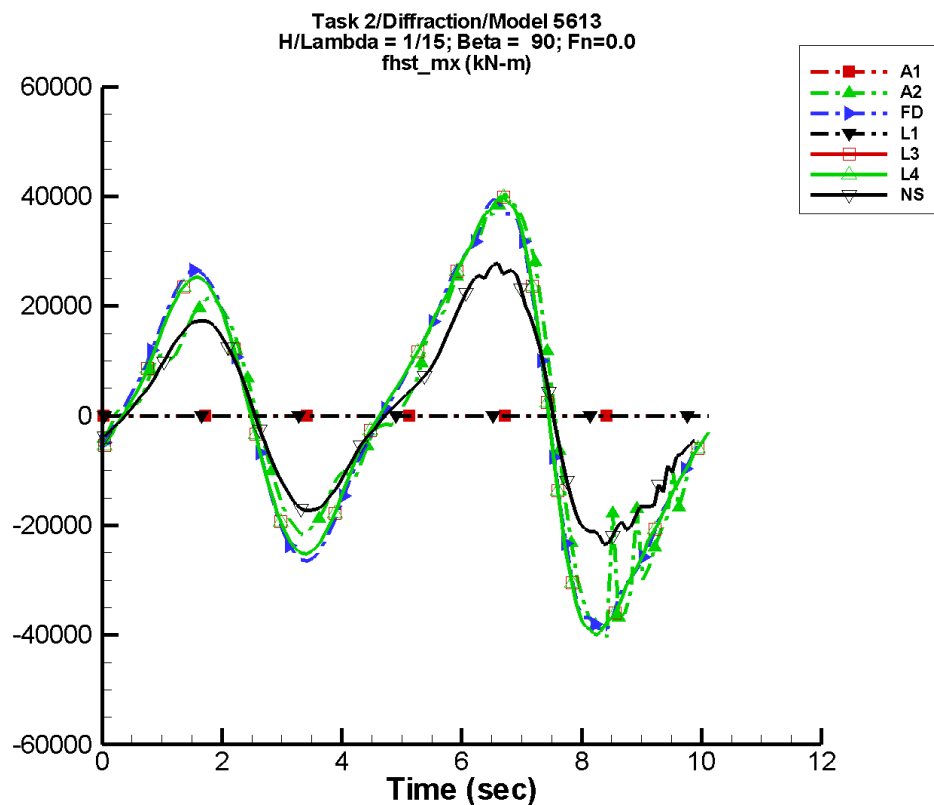
Table G–1201. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-4.77	4.91E+03	29	6.33	-3
A2	602.	5.66E+03	26	423.	-165
FD	710.	5.53E+03	18	513.	-158
L1	-0.404	4.93E+03	30	5.12	53
L3	70.9	5.60E+03	21	503.	-142
L4	70.9	5.60E+03	21	503.	-142
NF	—	—	—	—	—
NS	-298.	6.45E+03	16	127.	137

Table G–1202. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-4.91E+03	4.91E+03	-4.86E+03	4.85E+03
A2	-5.21E+03	5.99E+03	-5.13E+03	5.98E+03
FD	-4.87E+03	6.13E+03	-4.82E+03	6.07E+03
L1	-4.93E+03	4.93E+03	-4.91E+03	4.91E+03
L3	-5.47E+03	5.62E+03	-5.45E+03	5.60E+03
L4	-5.47E+03	5.62E+03	-5.45E+03	5.60E+03
NF	—	—	—	—
NS	-6.84E+03	6.00E+03	-6.77E+03	5.94E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–602. Time history of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
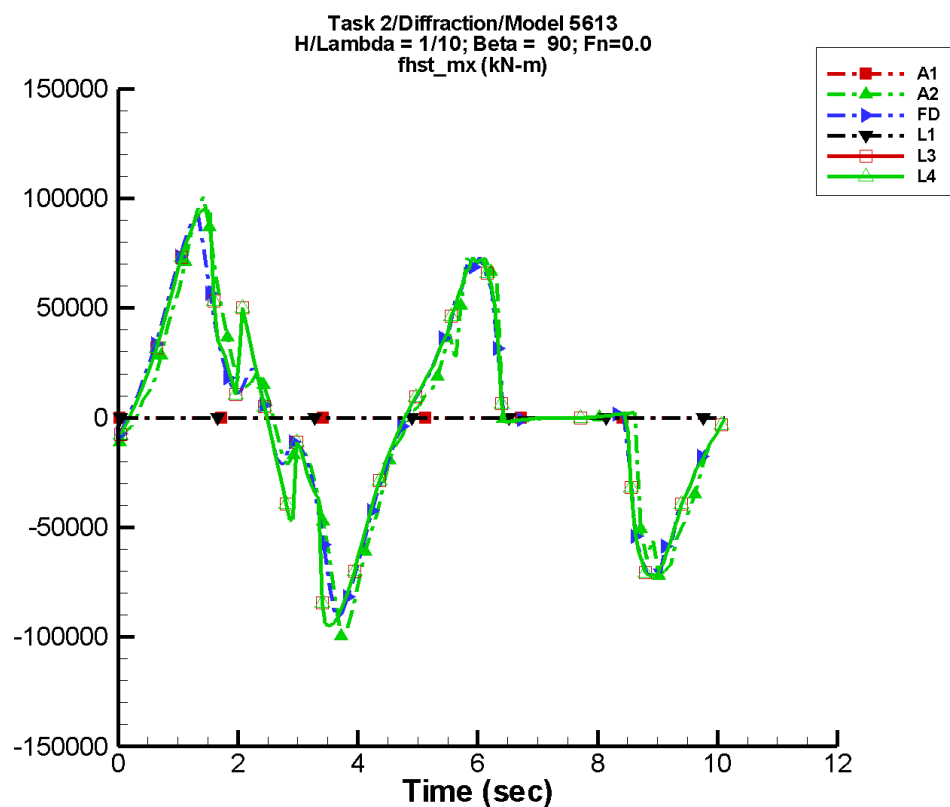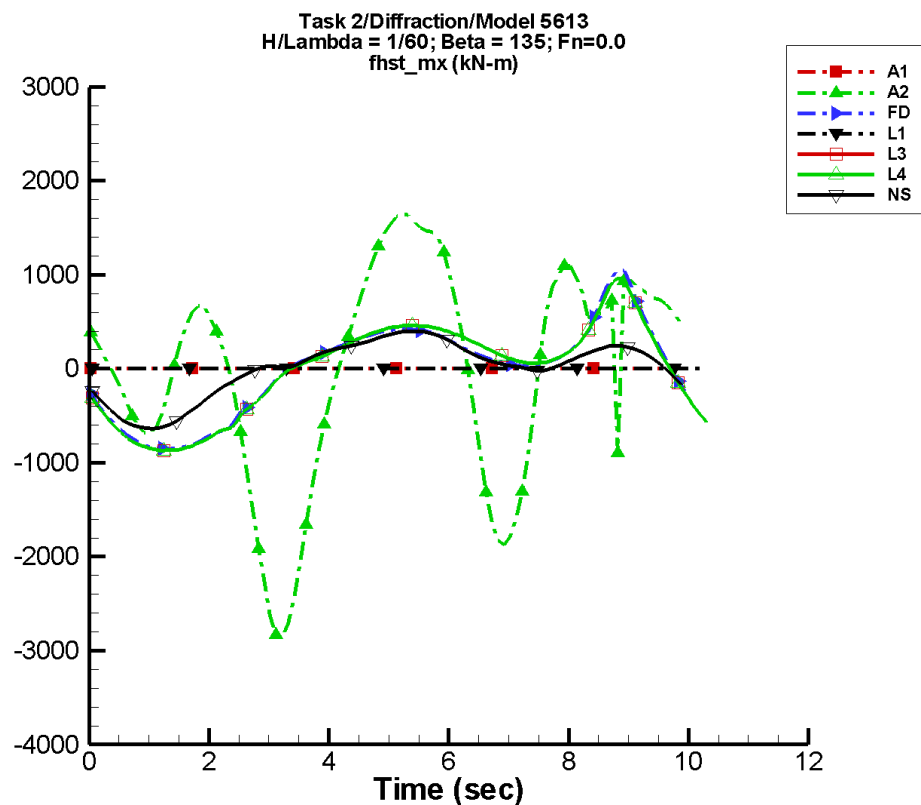
Table G–1203. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-14.3	1.48E+04	29	19.0	-3
A2	6.42E+03	1.75E+04	10	3.10E+03	136
FD	5.44E+03	1.79E+04	5	3.23E+03	147
L1	-1.21	1.48E+04	30	15.4	53
L3	1.64E+03	1.77E+04	7	2.89E+03	154
L4	1.64E+03	1.77E+04	7	2.89E+03	154
NF	—	—	—	—	—
NS	577.	1.96E+04	6	3.01E+03	129

Table G–1204. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.48E+04	1.48E+04	-1.46E+04	1.46E+04
A2	-1.34E+04	2.14E+04	-1.31E+04	2.12E+04
FD	-1.43E+04	2.15E+04	-1.41E+04	2.14E+04
L1	-1.48E+04	1.48E+04	-1.47E+04	1.47E+04
L3	-1.75E+04	1.78E+04	-1.75E+04	1.77E+04
L4	-1.75E+04	1.78E+04	-1.75E+04	1.77E+04
NF	—	—	—	—
NS	-2.11E+04	1.77E+04	-2.08E+04	1.75E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–603. Time history of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1205. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-19.2	1.97E+04	29	25.4	-3
A2	1.34E+04	1.94E+04	8	4.00E+03	114
FD	1.18E+04	2.02E+04	2	4.27E+03	108
L1	-1.62	1.97E+04	30	20.5	53
L3	6.31E+03	1.92E+04	3	3.78E+03	110
L4	6.31E+03	1.92E+04	3	3.78E+03	110
NF	—	—	—	—	—
NS	3.42E+03	2.35E+04	-1	4.75E+03	86

Table G–1206. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
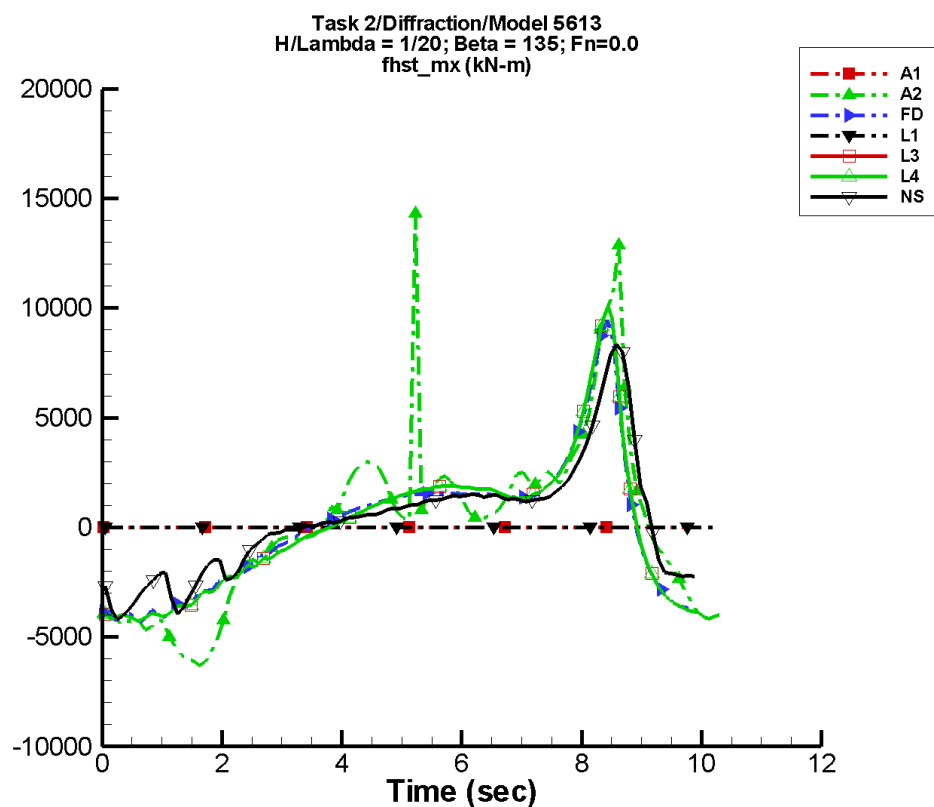
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.97E+04	1.97E+04	-1.95E+04	1.95E+04
A2	-1.12E+04	2.95E+04	-1.08E+04	2.94E+04
FD	-1.31E+04	2.83E+04	-1.28E+04	2.81E+04
L1	-1.97E+04	1.97E+04	-1.97E+04	1.97E+04
L3	-1.68E+04	2.20E+04	-1.67E+04	2.20E+04
L4	-1.68E+04	2.20E+04	-1.67E+04	2.20E+04
NF	—	—	—	—
NS	-2.49E+04	2.26E+04	-2.47E+04	2.23E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–604. Time history of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
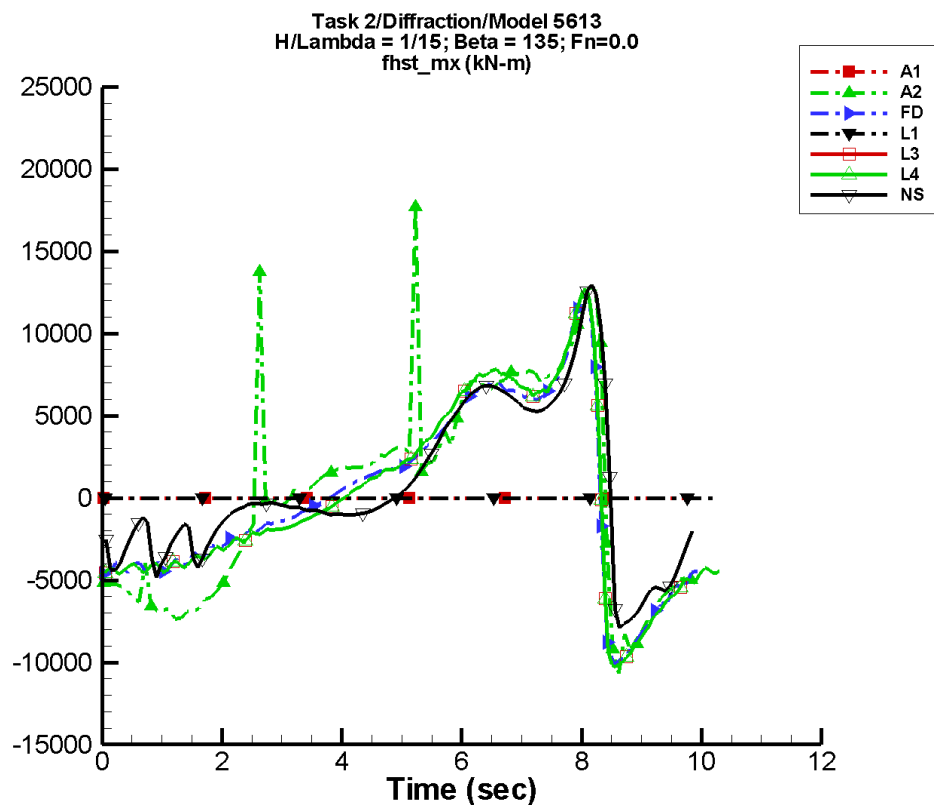
Table G–1207. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-28.7	2.96E+04	29	38.1	-3
A2	2.63E+04	2.02E+04	-3	5.49E+03	18
FD	2.76E+04	2.05E+04	-4	3.02E+03	16
L1	-2.43	2.96E+04	30	30.7	53
L3	1.76E+04	1.77E+04	-6	3.66E+03	9
L4	1.76E+04	1.77E+04	-6	3.66E+03	9
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1208. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.96E+04	2.96E+04	-2.93E+04	2.92E+04
A2	3.15E+03	4.77E+04	3.82E+03	4.60E+04
FD	4.00E+03	4.63E+04	5.93E+03	4.59E+04
L1	-2.96E+04	2.96E+04	-2.95E+04	2.95E+04
L3	-6.37E+03	3.39E+04	-3.56E+03	3.37E+04
L4	-6.37E+03	3.39E+04	-3.56E+03	3.37E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–605. Time history of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
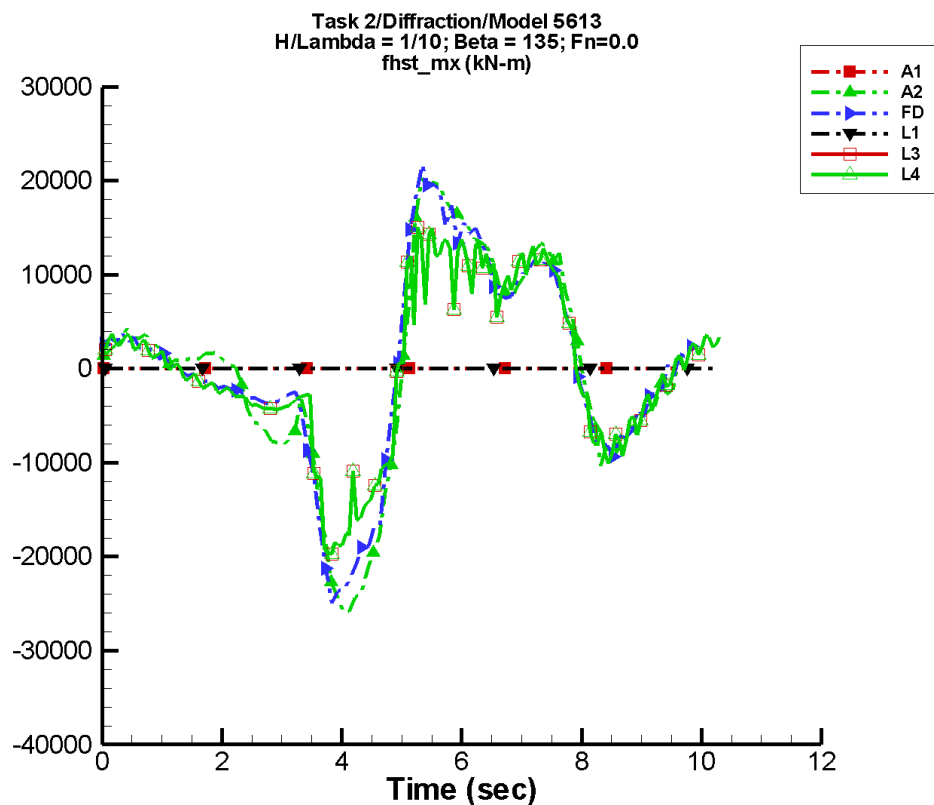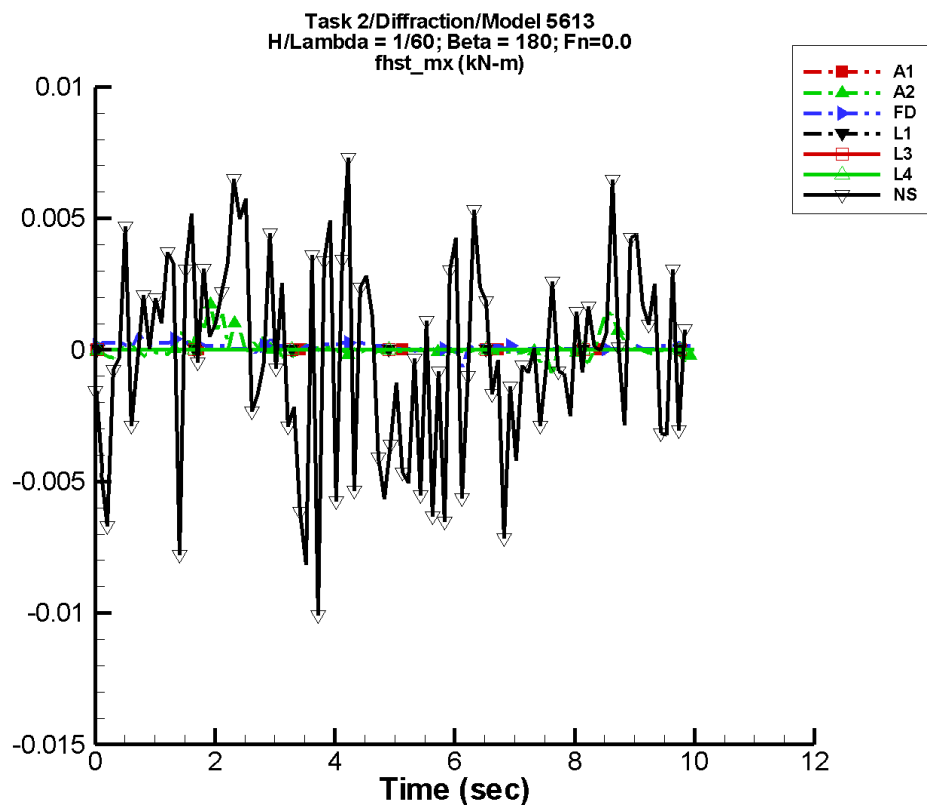
Table G–1209. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-10.8	1.27E+04	14	14.8	-12
A2	606.	1.25E+04	8	727.	103
FD	716.	1.25E+04	7	596.	115
L1	5.22	1.27E+04	14	8.82	44
L3	74.8	1.25E+04	10	583.	124
L4	74.8	1.25E+04	10	583.	124
NF	—	—	—	—	—
NS	-312.	1.28E+04	7	122.	96

Table G–1210. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.27E+04	1.27E+04	-1.26E+04	1.27E+04
A2	-1.26E+04	1.24E+04	-1.24E+04	1.24E+04
FD	-1.23E+04	1.26E+04	-1.22E+04	1.25E+04
L1	-1.27E+04	1.27E+04	-1.27E+04	1.27E+04
L3	-1.29E+04	1.20E+04	-1.28E+04	1.19E+04
L4	-1.29E+04	1.20E+04	-1.28E+04	1.19E+04
NF	—	—	—	—
NS	-1.32E+04	1.23E+04	-1.31E+04	1.23E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–606. Time history of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1211. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
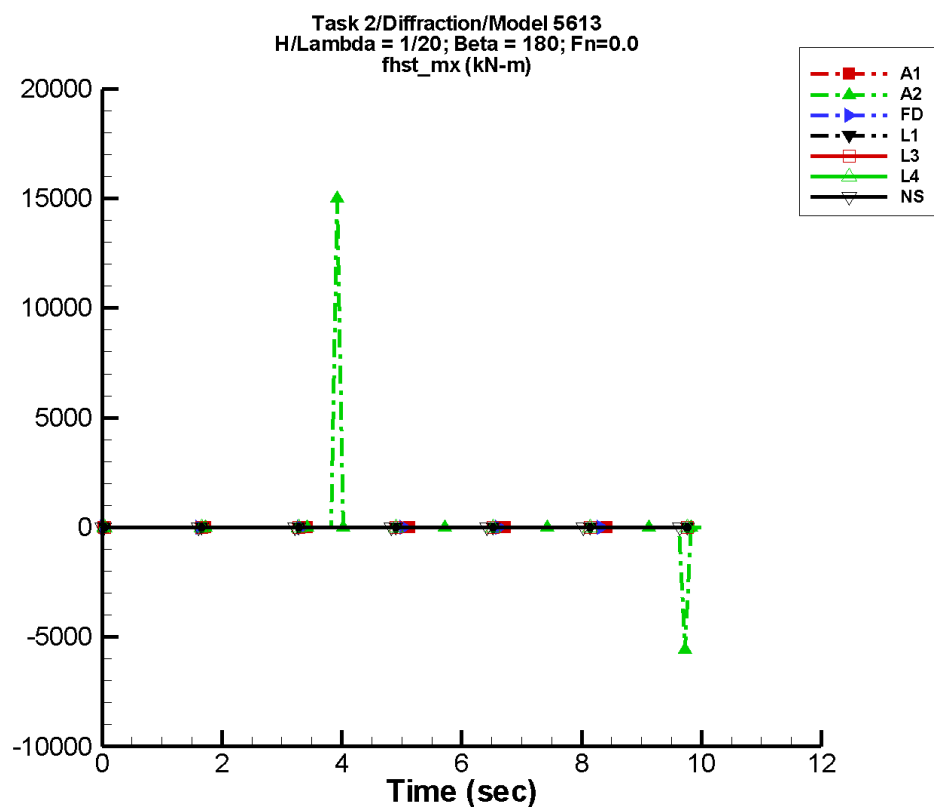
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-32.4	3.82E+04	14	44.5	-12
A2	6.38E+03	3.37E+04	2	3.76E+03	75
FD	5.33E+03	3.47E+04	1	3.98E+03	80
L1	15.7	3.81E+04	14	26.5	44
L3	1.55E+03	3.33E+04	3	3.72E+03	86
L4	1.55E+03	3.33E+04	3	3.72E+03	86
NF	—	—	—	—	—
NS	245.	3.43E+04	2	2.93E+03	76

Table G–1212. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-3.82E+04	3.82E+04	-3.78E+04	3.83E+04
A2	-3.22E+04	3.72E+04	-3.18E+04	3.70E+04
FD	-3.43E+04	3.67E+04	-3.38E+04	3.65E+04
L1	-3.81E+04	3.81E+04	-3.80E+04	3.80E+04
L3	-3.66E+04	3.18E+04	-3.64E+04	3.17E+04
L4	-3.66E+04	3.18E+04	-3.64E+04	3.17E+04
NF	—	—	—	—
NS	-3.79E+04	3.25E+04	-3.74E+04	3.25E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–607. Time history of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
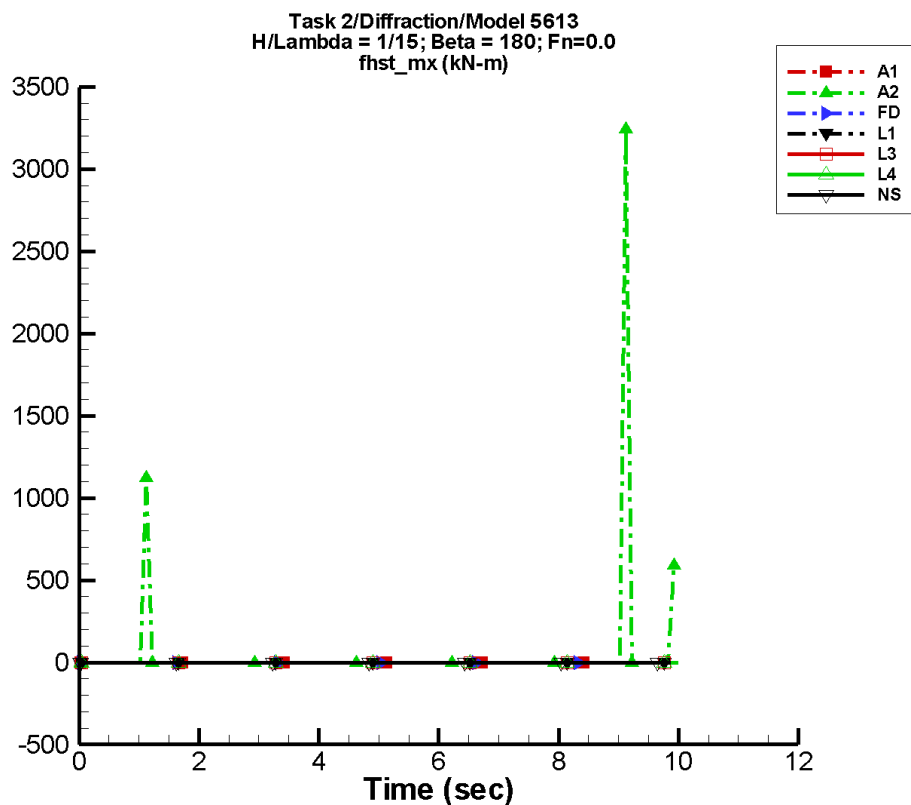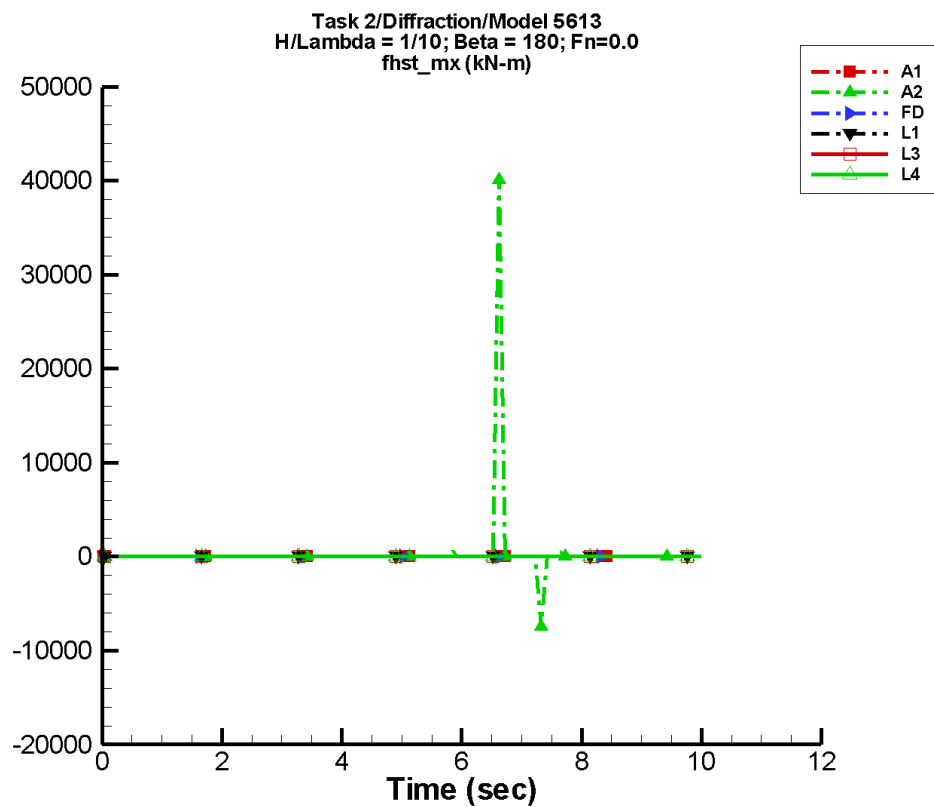
Table G–1213. Coefficients of the Fourier fit $a_0 + a_1 \sin (\omega t + \Phi_1) + a_2 \sin (2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-43.3	5.10E+04	14	59.4	-12
A2	1.33E+04	3.73E+04	2	3.97E+03	67
FD	1.17E+04	3.94E+04	-1	4.63E+03	64
L1	20.9	5.09E+04	14	35.3	44
L3	6.36E+03	3.55E+04	1	3.70E+03	66
L4	6.36E+03	3.55E+04	1	3.70E+03	66
NF	—	—	—	—	—
NS	2.31E+03	3.92E+04	-3	3.13E+03	47

Table G–1214. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-5.10E+04	5.10E+04	-5.05E+04	5.11E+04
A2	-3.12E+04	4.87E+04	-3.03E+04	4.82E+04
FD	-3.56E+04	4.80E+04	-3.46E+04	4.76E+04
L1	-5.09E+04	5.09E+04	-5.07E+04	5.07E+04
L3	-3.73E+04	3.97E+04	-3.69E+04	3.95E+04
L4	-3.73E+04	3.97E+04	-3.69E+04	3.95E+04
NF	—	—	—	—
NS	-4.30E+04	4.10E+04	-4.27E+04	4.11E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–608. Time history of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
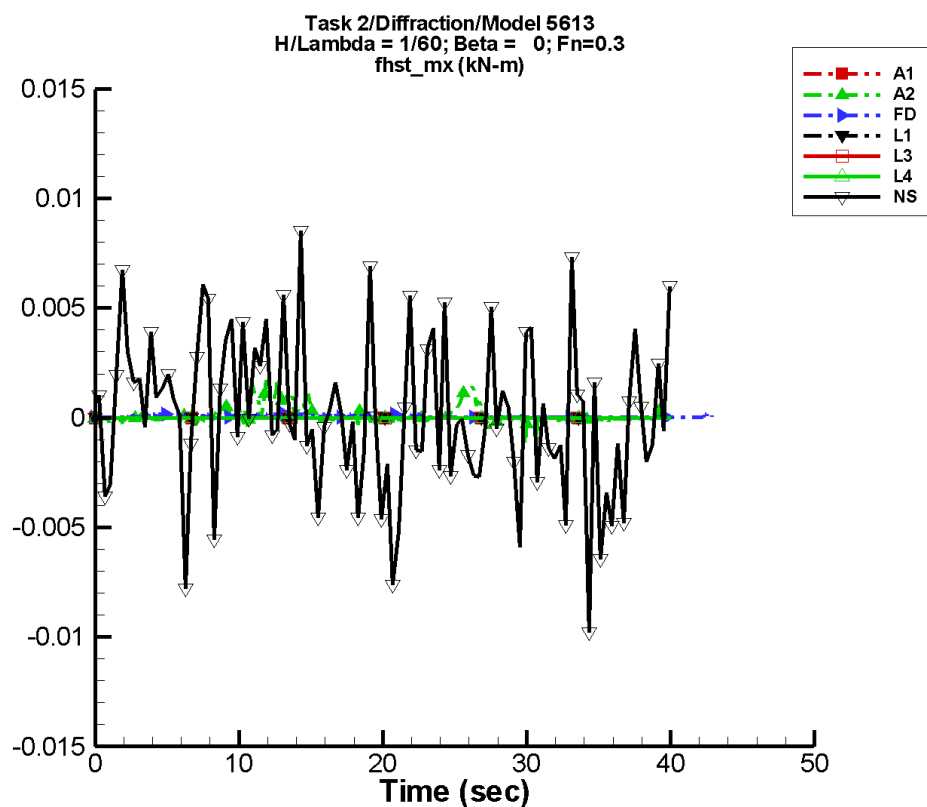
Table G–1215. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-64.9	7.65E+04	14	89.1	-12
A2	2.60E+04	3.48E+04	-6	8.68E+03	-97
FD	2.71E+04	3.69E+04	-6	5.71E+03	-101
L1	31.3	7.63E+04	14	52.9	44
L3	1.72E+04	2.89E+04	-7	6.78E+03	-91
L4	1.72E+04	2.89E+04	-7	6.78E+03	-91
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1216. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

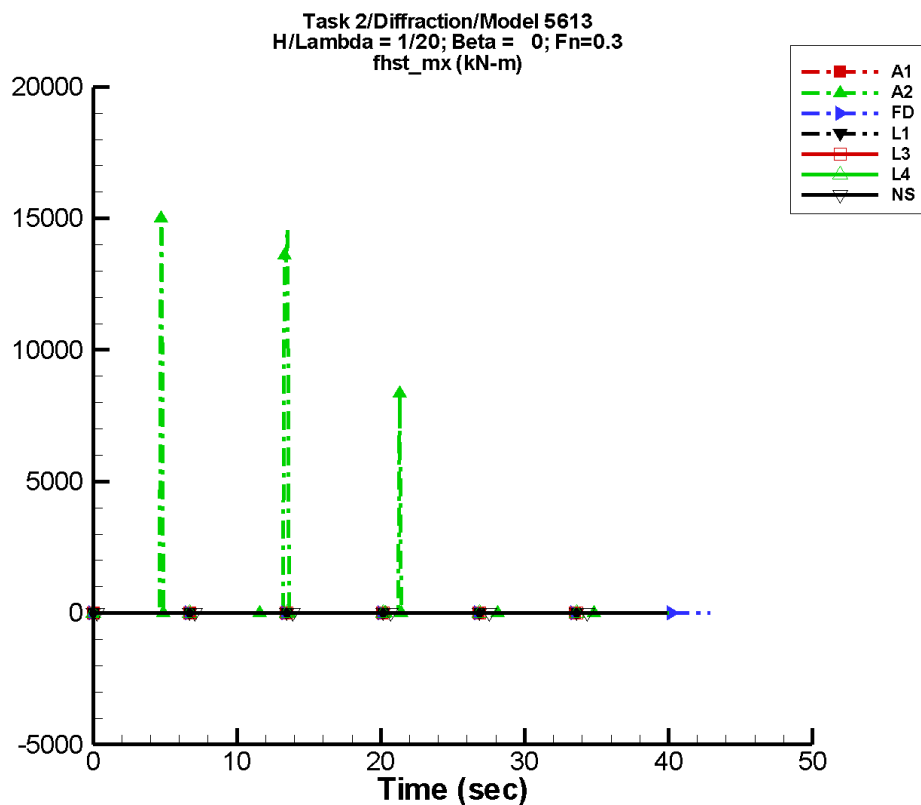| Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-7.65E+04	7.65E+04	-7.57E+04	7.67E+04
A2	-5.78E+03	6.73E+04	-5.36E+03	6.69E+04
FD	-6.86E+03	6.76E+04	-6.36E+03	6.75E+04
L1	-7.63E+04	7.63E+04	-7.60E+04	7.60E+04
L3	-8.40E+03	5.05E+04	-7.84E+03	5.04E+04
L4	-8.40E+03	5.05E+04	-7.84E+03	5.04E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–609. Time history of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
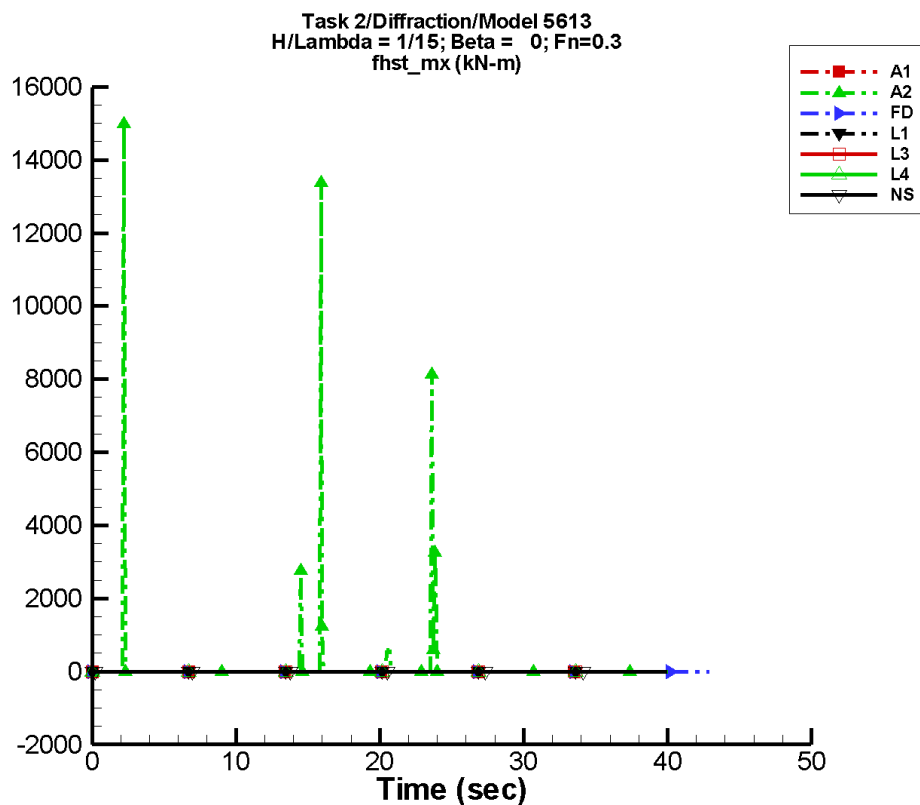
Table G–1217. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-15.7	2.49E+04	-4	23.8	-25
A2	610.	2.29E+04	-8	519.	-102
FD	734.	2.30E+04	-8	603.	-108
L1	-10.3	2.48E+04	-4	16.3	-37
L3	65.5	2.28E+04	-4	50.7	-37
L4	65.5	2.28E+04	-4	50.7	-37
NF	—	—	—	—	—
NS	-323.	2.18E+04	-2	159.	-88

Table G–1218. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.49E+04	2.49E+04	-2.46E+04	2.46E+04
A2	-2.15E+04	2.38E+04	-2.13E+04	2.36E+04
FD	-2.14E+04	2.41E+04	-2.14E+04	2.38E+04
L1	-2.48E+04	2.48E+04	-2.47E+04	2.48E+04
L3	-2.24E+04	2.27E+04	-2.23E+04	2.26E+04
L4	-2.24E+04	2.27E+04	-2.23E+04	2.26E+04
NF	—	—	—	—
NS	-2.19E+04	2.16E+04	-2.17E+04	2.14E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–610. Time history of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
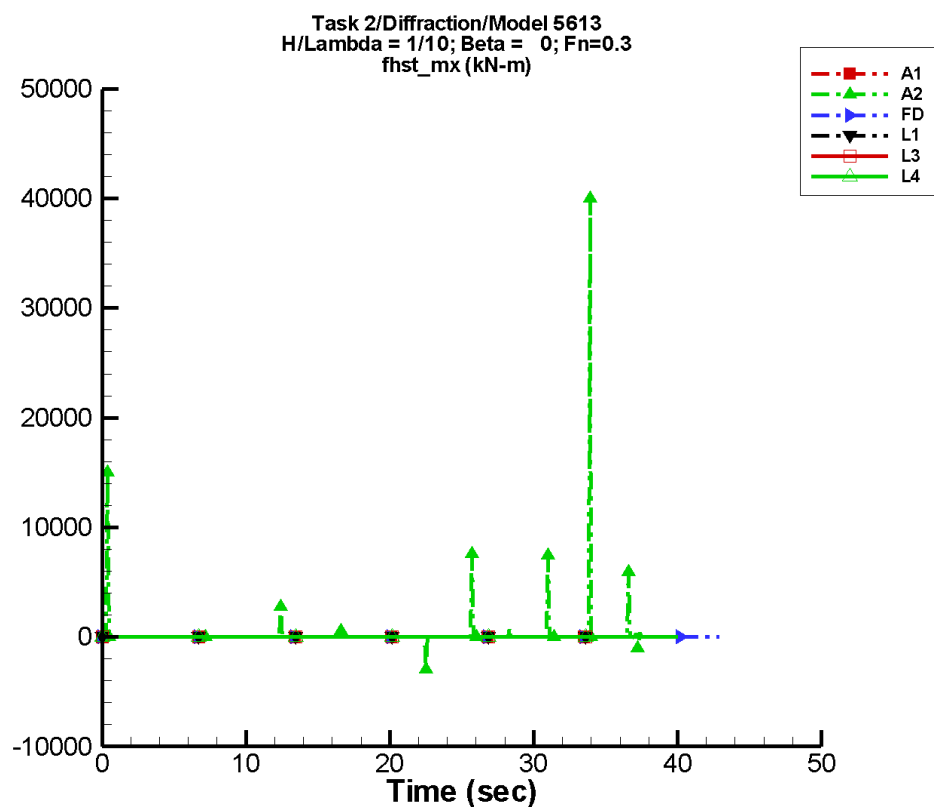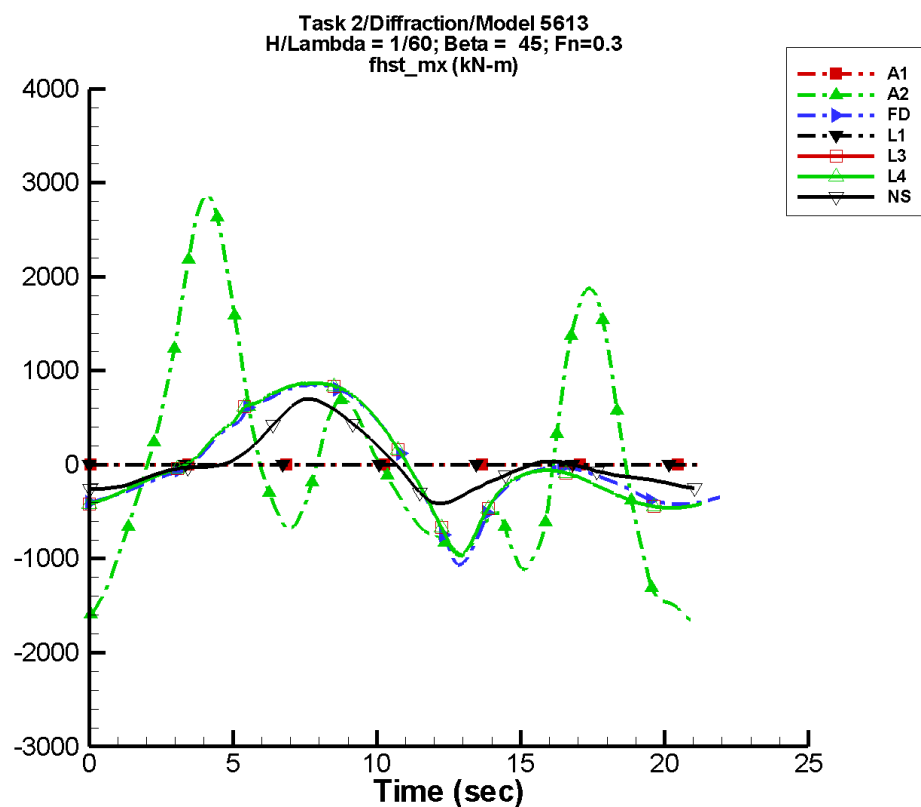
Table G–1219. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-47.3	7.48E+04	-4	71.7	-25
A2	6.51E+03	5.76E+04	-8	5.84E+03	-104
FD	5.56E+03	5.90E+04	-7	4.44E+03	-108
L1	-30.8	7.45E+04	-4	49.0	-37
L3	1.56E+03	5.57E+04	-4	1.18E+03	-82
L4	1.56E+03	5.57E+04	-4	1.18E+03	-82
NF	—	—	—	—	—
NS	2.98	5.53E+04	-1	4.24E+03	-95

Table G–1220. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-7.48E+04	7.48E+04	-7.41E+04	7.40E+04
A2	-4.22E+04	6.82E+04	-4.20E+04	6.71E+04
FD	-4.71E+04	6.71E+04	-4.72E+04	6.65E+04
L1	-7.45E+04	7.45E+04	-7.42E+04	7.43E+04
L3	-4.93E+04	5.64E+04	-4.92E+04	5.63E+04
L4	-4.93E+04	5.64E+04	-4.92E+04	5.63E+04
NF	—	—	—	—
NS	-4.86E+04	5.77E+04	-4.81E+04	5.74E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–611. Time history of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1221. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
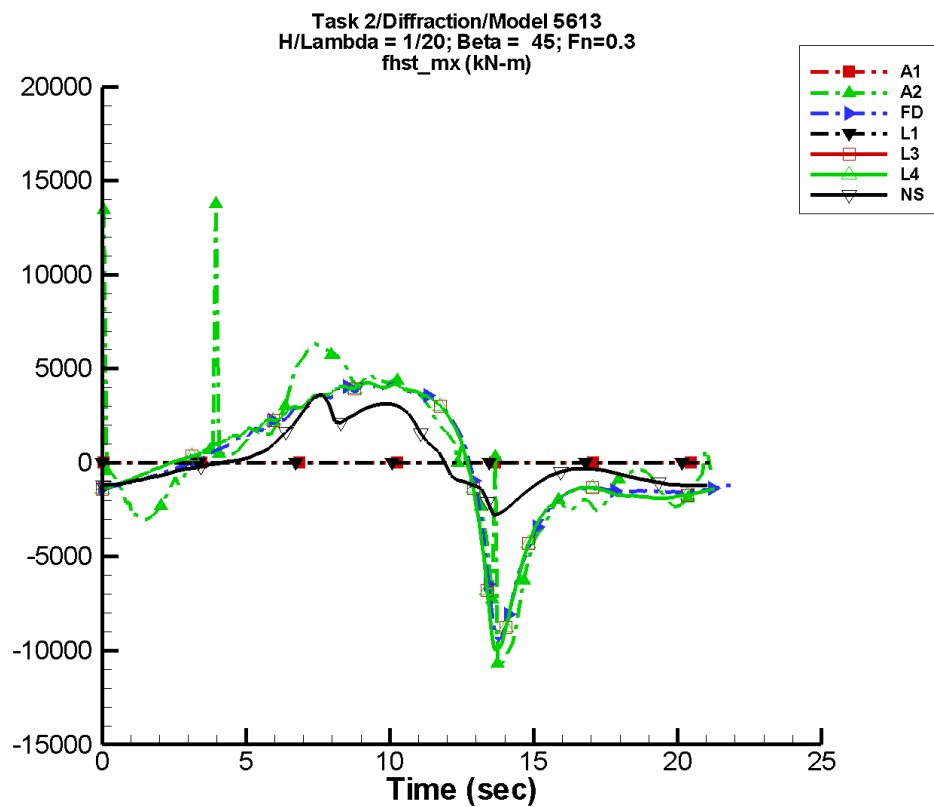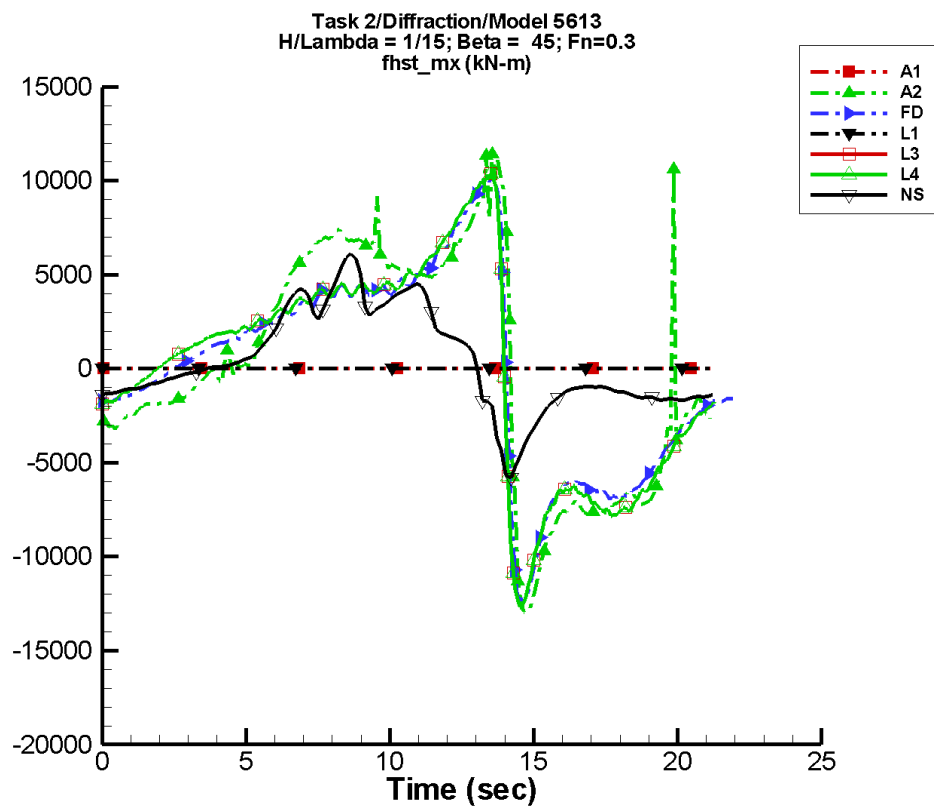
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-63.1	9.99E+04	-4	95.7	-25
A2	1.38E+04	6.46E+04	-7	1.32E+04	-104
FD	1.25E+04	6.70E+04	-7	1.17E+04	-110
L1	-41.0	9.94E+04	-4	65.4	-37
L3	6.30E+03	6.00E+04	-3	6.53E+03	-91
L4	6.30E+03	6.00E+04	-3	6.53E+03	-91
NF	—	—	—	—	—
NS	1.53E+03	6.10E+04	-1	9.09E+03	-94

Table G–1222. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-9.99E+04	9.99E+04	-9.89E+04	9.88E+04
A2	-3.99E+04	8.63E+04	-3.86E+04	8.52E+04
FD	-4.43E+04	8.62E+04	-4.34E+04	8.54E+04
L1	-9.93E+04	9.94E+04	-9.90E+04	9.90E+04
L3	-4.64E+04	6.80E+04	-4.59E+04	6.78E+04
L4	-4.64E+04	6.80E+04	-4.59E+04	6.78E+04
NF	—	—	—	—
NS	-5.02E+04	6.76E+04	-4.96E+04	6.76E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.0
ffk_z (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–612. Time history of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
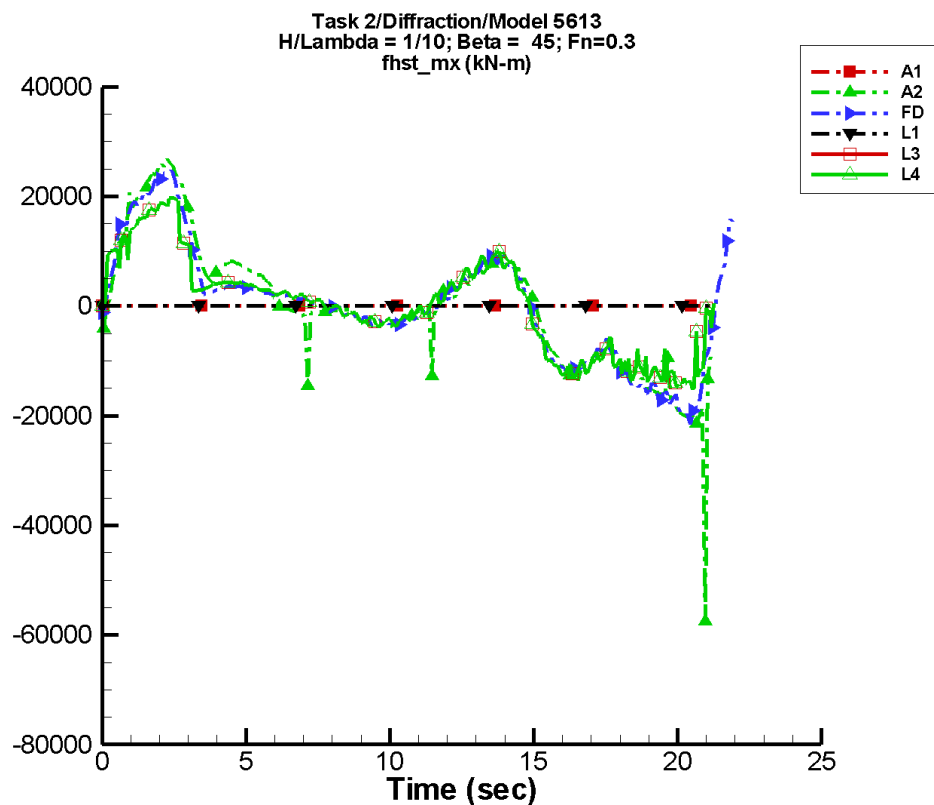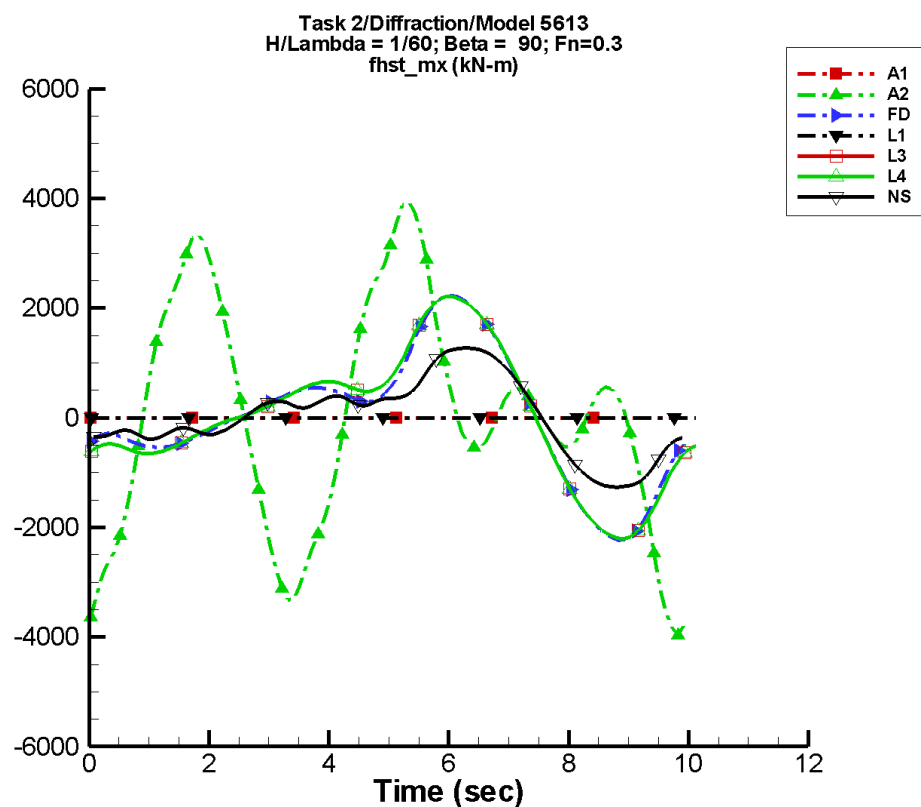
Table G–1223. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-94.7	1.50E+05	-4	144.	-25
A2	2.69E+04	5.49E+04	-6	1.81E+04	-97
FD	2.86E+04	5.83E+04	-5	2.11E+04	-110
L1	-61.6	1.49E+05	-4	98.1	-37
L3	1.71E+04	4.19E+04	0	1.11E+04	-83
L4	1.71E+04	4.19E+04	0	1.11E+04	-83
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1224. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.50E+05	1.50E+05	-1.48E+05	1.48E+05
A2	-3.39E+04	9.33E+04	-2.99E+04	8.84E+04
FD	-3.84E+04	9.53E+04	-3.31E+04	9.29E+04
L1	-1.49E+05	1.49E+05	-1.48E+05	1.49E+05
L3	-3.94E+04	7.55E+04	-3.82E+04	7.03E+04
L4	-3.94E+04	7.55E+04	-3.82E+04	7.03E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.0
ffk_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–613. Time history of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1225. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-4.51	1.27E+04	-22	9.35	-46
A2	613.	1.25E+04	-24	768.	44
FD	725.	1.25E+04	-22	561.	35
L1	5.77	1.27E+04	-22	16.3	-7
L3	75.8	1.25E+04	-18	557.	35
L4	75.8	1.25E+04	-18	557.	35
NF	—	—	—	—	—
NS	-312.	1.27E+04	-11	132.	69

Table G–1226. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
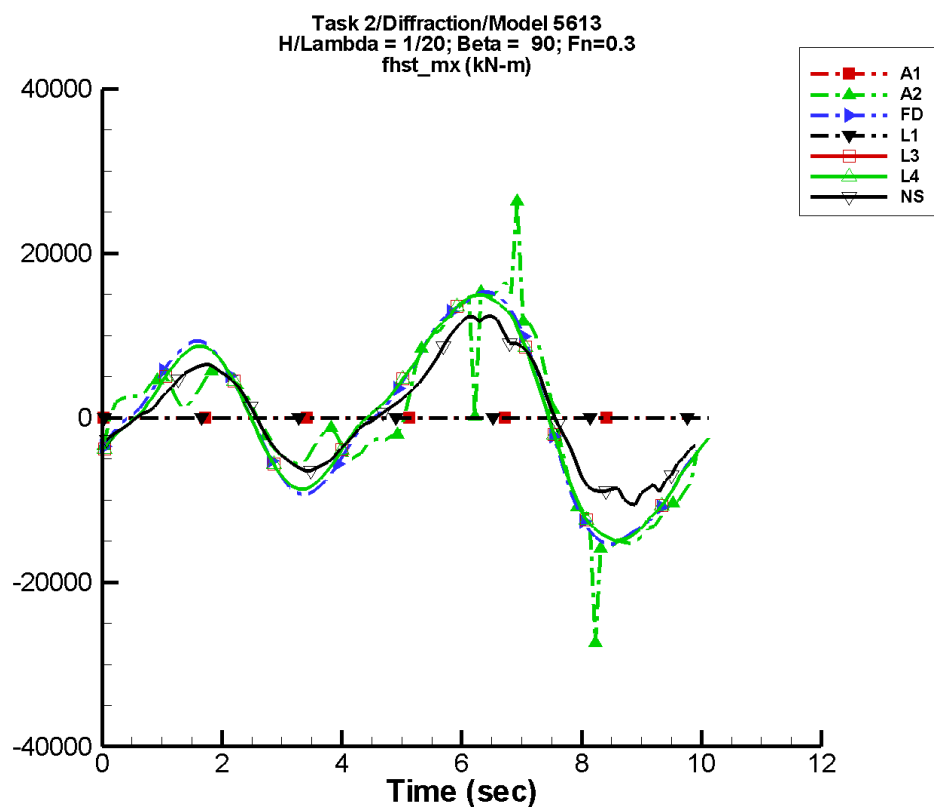
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.27E+04	1.27E+04	-1.26E+04	1.26E+04
A2	-1.26E+04	1.24E+04	-1.24E+04	1.23E+04
FD	-1.23E+04	1.26E+04	-1.22E+04	1.25E+04
L1	-1.27E+04	1.27E+04	-1.27E+04	1.27E+04
L3	-1.29E+04	1.20E+04	-1.28E+04	1.19E+04
L4	-1.29E+04	1.20E+04	-1.28E+04	1.19E+04
NF	—	—	—	—
NS	-1.32E+04	1.23E+04	-1.31E+04	1.22E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 135; Fn=0.0
ffk_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–614. Time history of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
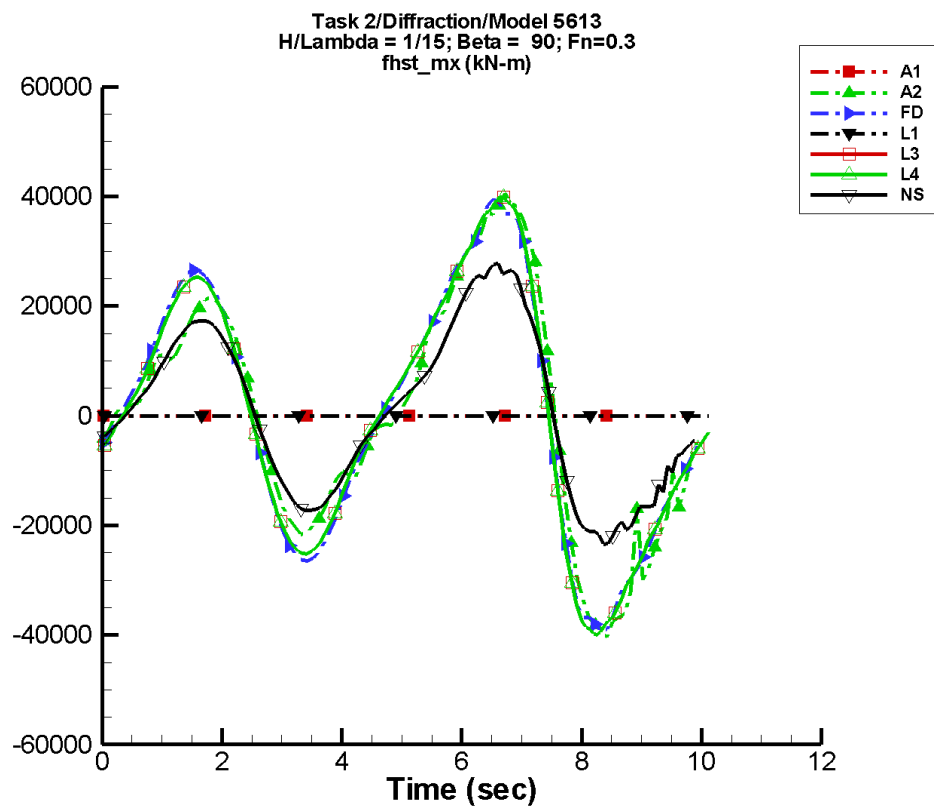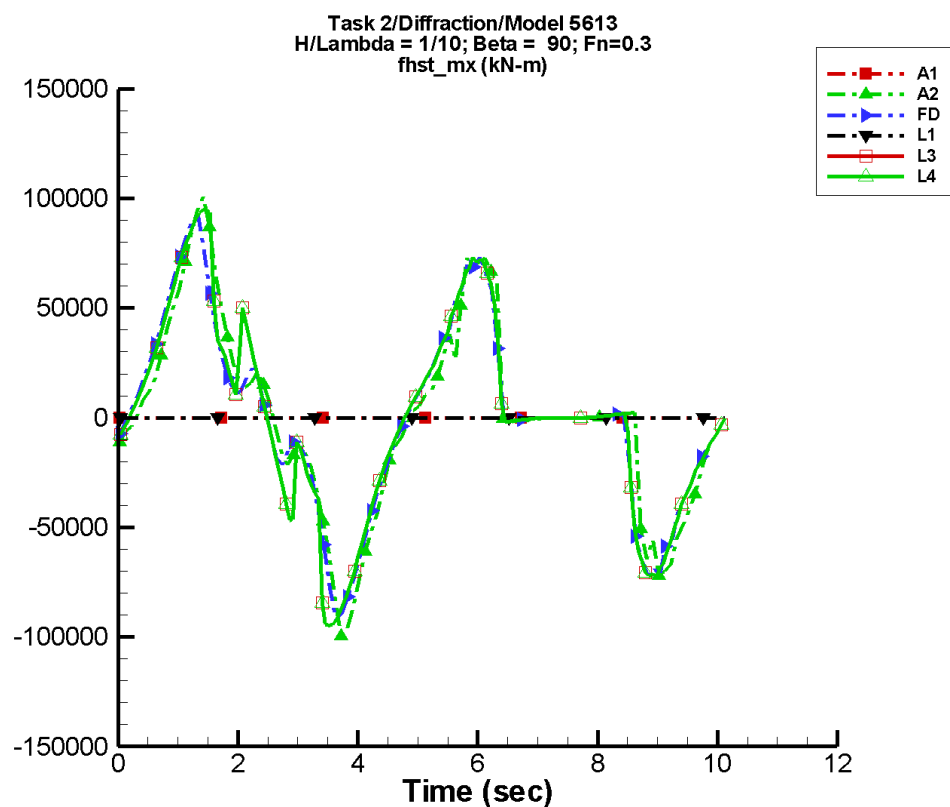
Table G–1227. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-13.6	3.82E+04	-22	28.1	-46
A2	6.36E+03	3.36E+04	-19	3.78E+03	73
FD	5.39E+03	3.45E+04	-16	3.67E+03	66
L1	17.3	3.82E+04	-22	48.8	-7
L3	1.56E+03	3.33E+04	-11	3.67E+03	73
L4	1.56E+03	3.33E+04	-11	3.67E+03	73
NF	—	—	—	—	—
NS	185.	3.44E+04	-6	3.09E+03	90

Table G–1228. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-3.82E+04	3.82E+04	-3.78E+04	3.78E+04
A2	-3.22E+04	3.69E+04	-3.18E+04	3.68E+04
FD	-3.43E+04	3.67E+04	-3.38E+04	3.65E+04
L1	-3.81E+04	3.81E+04	-3.80E+04	3.80E+04
L3	-3.66E+04	3.18E+04	-3.64E+04	3.17E+04
L4	-3.66E+04	3.18E+04	-3.64E+04	3.17E+04
NF	—	—	—	—
NS	-3.79E+04	3.25E+04	-3.75E+04	3.21E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–615. Time history of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
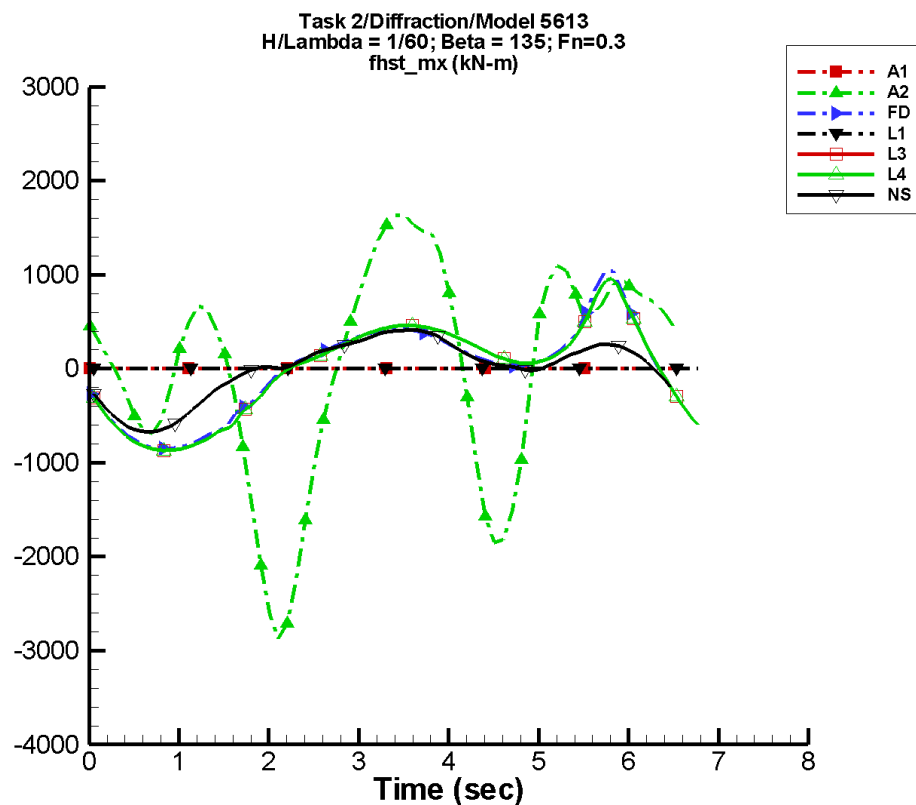
Table G–1229. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-18.1	5.10E+04	-22	37.6	-46
A2	1.33E+04	3.75E+04	-19	3.73E+03	85
FD	1.17E+04	3.95E+04	-16	4.51E+03	77
L1	23.1	5.09E+04	-22	65.1	-7
L3	6.31E+03	3.58E+04	-10	4.15E+03	90
L4	6.31E+03	3.58E+04	-10	4.15E+03	90
NF	—	—	—	—	—
NS	2.28E+03	3.95E+04	0	3.31E+03	122

Table G–1230. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-5.10E+04	5.10E+04	-5.05E+04	5.05E+04
A2	-3.12E+04	4.87E+04	-3.03E+04	4.82E+04
FD	-3.56E+04	4.80E+04	-3.55E+04	4.76E+04
L1	-5.09E+04	5.09E+04	-5.07E+04	5.07E+04
L3	-3.73E+04	3.97E+04	-3.69E+04	3.95E+04
L4	-3.73E+04	3.97E+04	-3.69E+04	3.95E+04
NF	—	—	—	—
NS	-4.31E+04	4.09E+04	-4.27E+04	4.07E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–616. Time history of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1231. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
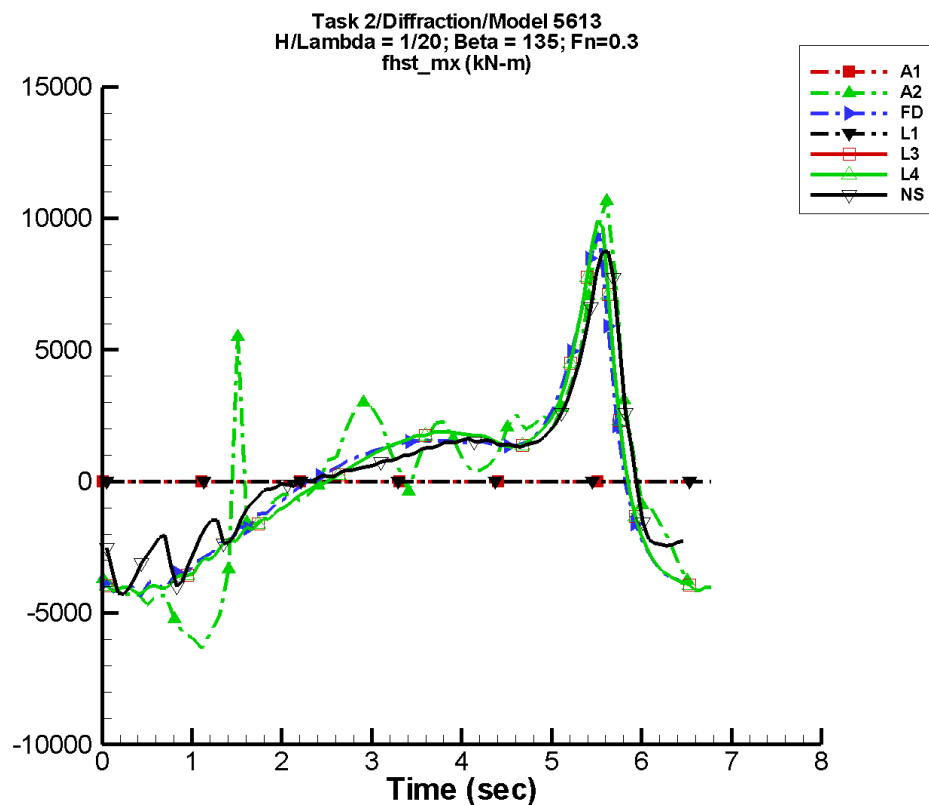
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-27.2	7.65E+04	-22	56.3	-46
A2	2.59E+04	3.37E+04	-9	7.13E+03	-112
FD	2.74E+04	3.61E+04	-10	6.47E+03	-104
L1	34.6	7.63E+04	-22	97.6	-7
L3	1.73E+04	2.86E+04	-2	7.02E+03	-99
L4	1.73E+04	2.86E+04	-2	7.02E+03	-99
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1232. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-7.65E+04	7.65E+04	-7.57E+04	7.57E+04
A2	-5.74E+03	6.73E+04	-5.36E+03	6.62E+04
FD	-6.83E+03	6.75E+04	-6.80E+03	6.75E+04
L1	-7.63E+04	7.63E+04	-7.60E+04	7.60E+04
L3	-8.40E+03	5.05E+04	-7.84E+03	5.04E+04
L4	-8.40E+03	5.05E+04	-7.84E+03	5.04E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–617. Time history of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
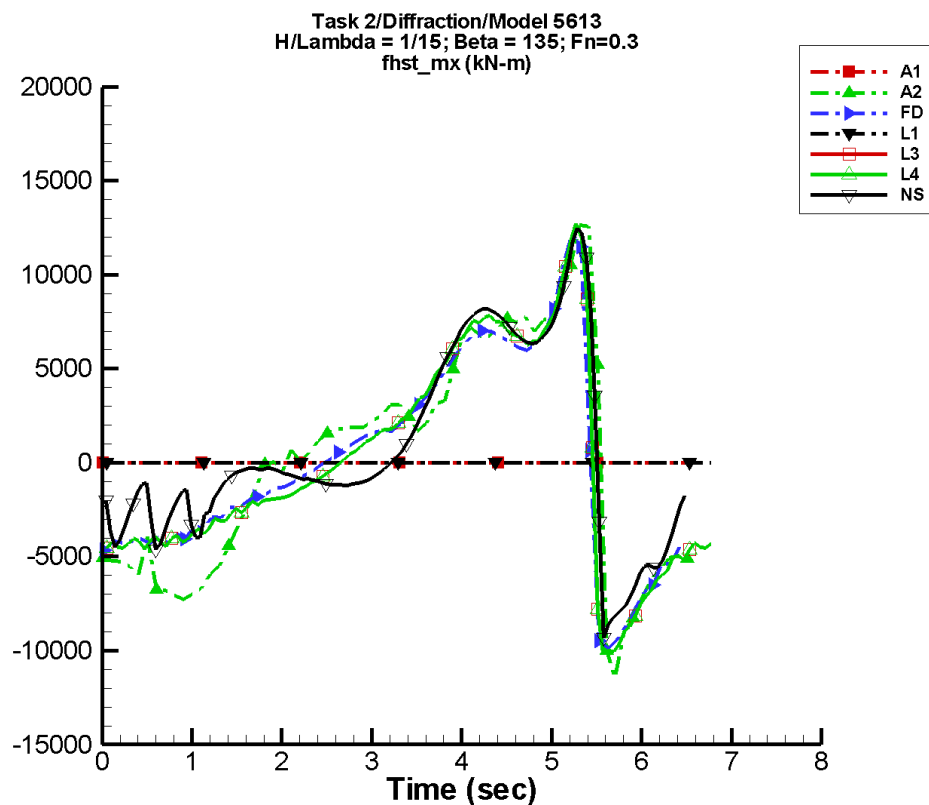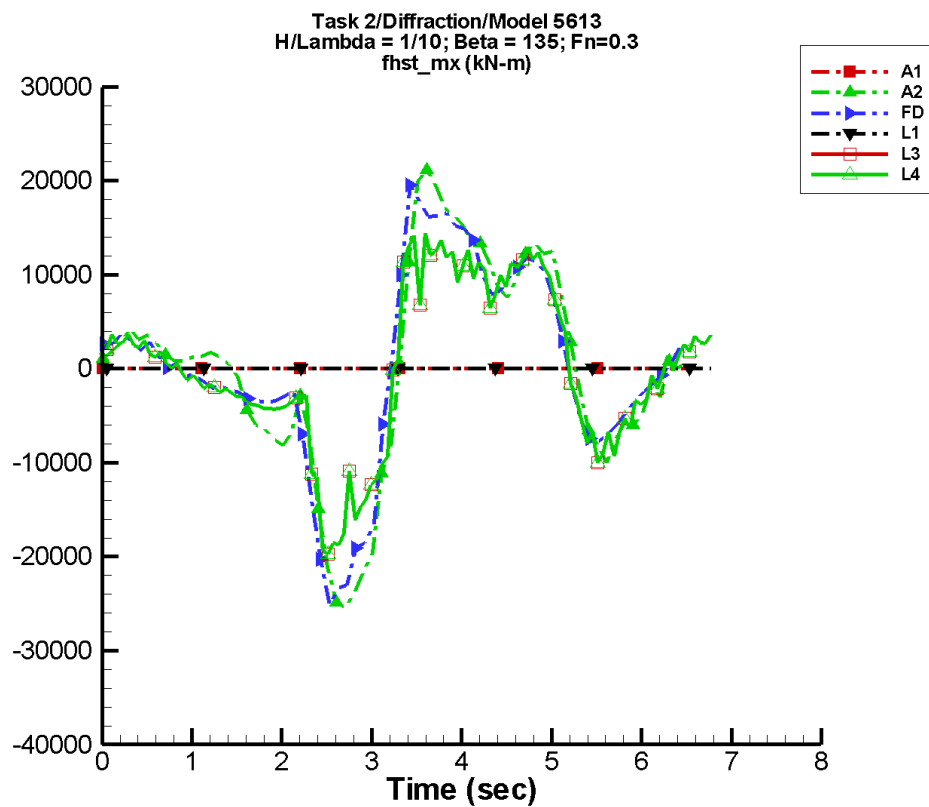
Table G–1233. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-0.385	4.91E+03	-38	3.02	-75
A2	607.	5.69E+03	-39	467.	-45
FD	699.	5.56E+03	-34	511.	-49
L1	4.28	4.93E+03	-38	4.29	-7
L3	71.4	5.61E+03	-29	511.	-51
L4	71.4	5.61E+03	-29	511.	-51
NF	—	—	—	—	—
NS	-295.	6.45E+03	-20	135.	24

Table G–1234. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-4.91E+03	4.91E+03	-4.86E+03	4.86E+03
A2	-5.21E+03	5.99E+03	-5.13E+03	5.93E+03
FD	-4.87E+03	6.13E+03	-4.82E+03	6.07E+03
L1	-4.93E+03	4.93E+03	-4.91E+03	4.91E+03
L3	-5.47E+03	5.62E+03	-5.45E+03	5.60E+03
L4	-5.47E+03	5.62E+03	-5.45E+03	5.60E+03
NF	—	—	—	—
NS	-6.84E+03	6.00E+03	-6.77E+03	5.94E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–618. Time history of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
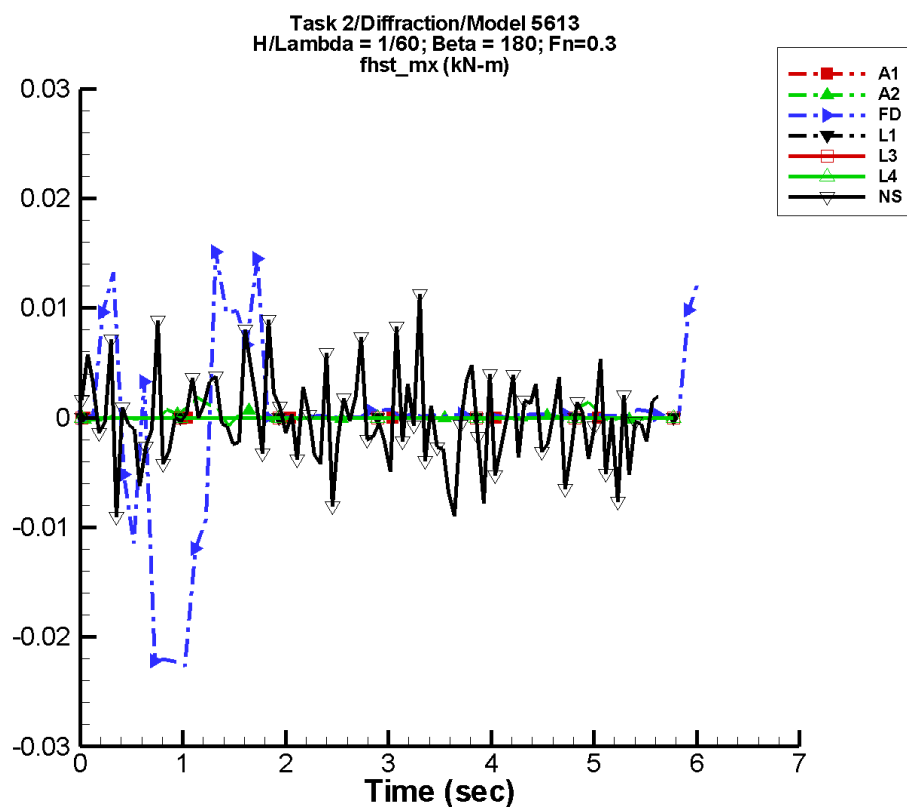
Table G–1235. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.16	1.48E+04	-38	9.07	-75
A2	6.43E+03	1.73E+04	-26	3.27E+03	16
FD	5.49E+03	1.77E+04	-20	3.01E+03	5
L1	12.9	1.48E+04	-38	12.9	-7
L3	1.71E+03	1.76E+04	-14	2.65E+03	12
L4	1.71E+03	1.76E+04	-14	2.65E+03	12
NF	—	—	—	—	—
NS	597.	1.96E+04	-10	3.27E+03	40

Table G–1236. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.48E+04	1.48E+04	-1.46E+04	1.46E+04
A2	-1.34E+04	2.13E+04	-1.31E+04	2.12E+04
FD	-1.43E+04	2.16E+04	-1.41E+04	2.14E+04
L1	-1.48E+04	1.48E+04	-1.47E+04	1.47E+04
L3	-1.75E+04	1.78E+04	-1.75E+04	1.77E+04
L4	-1.75E+04	1.78E+04	-1.75E+04	1.77E+04
NF	—	—	—	—
NS	-2.11E+04	1.77E+04	-2.09E+04	1.75E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–619. Time history of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

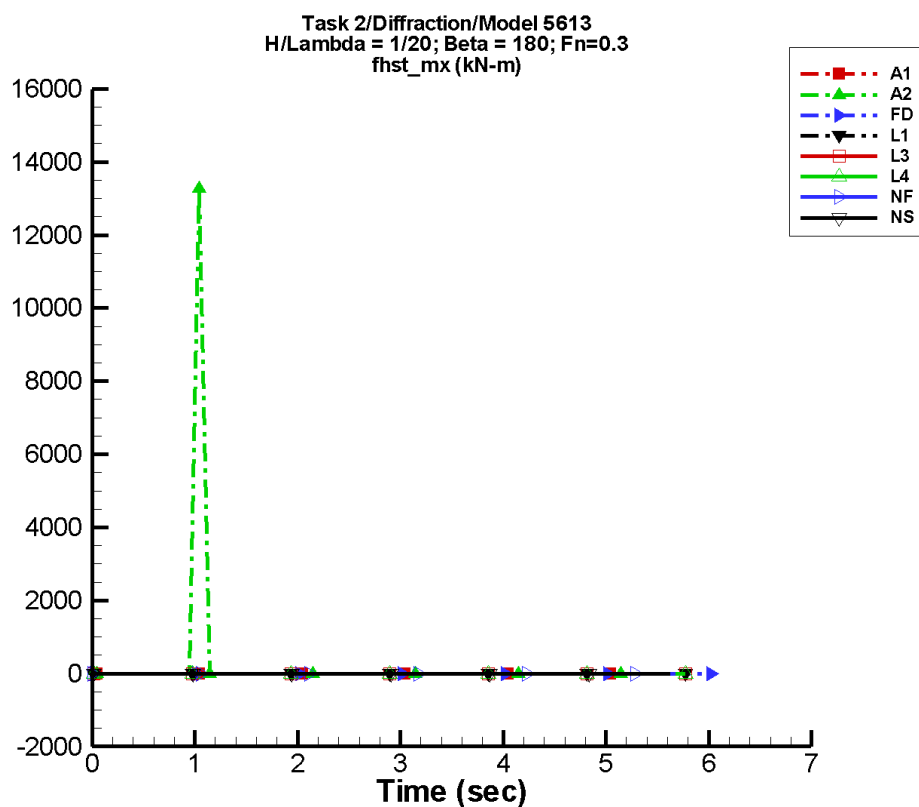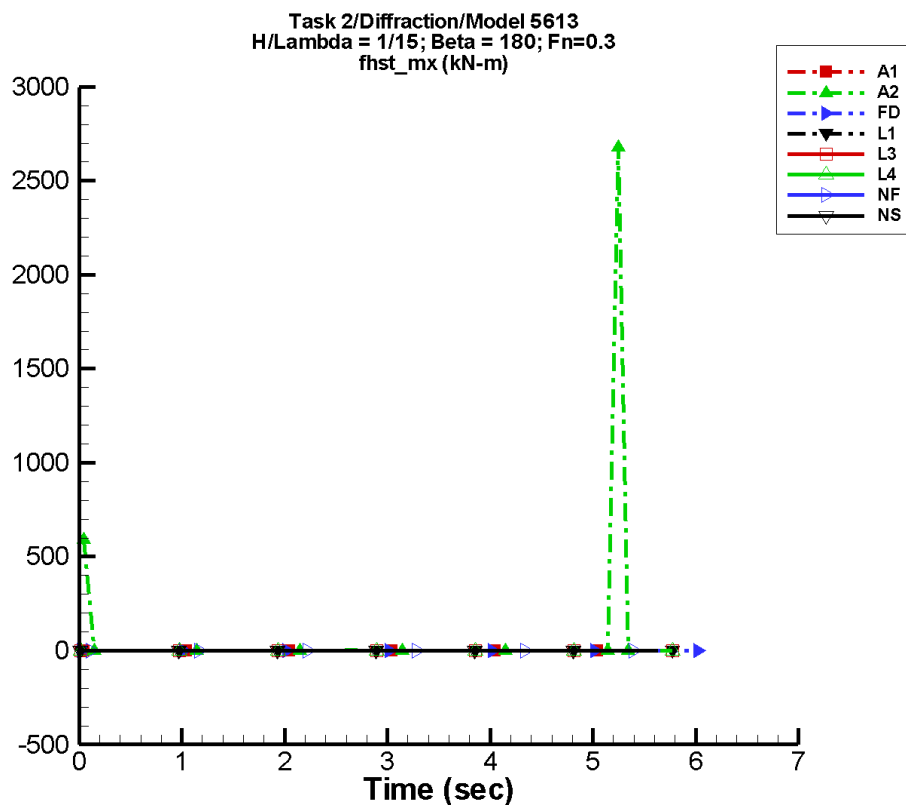Table G–1237. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.55	1.97E+04	-38	12.1	-75
A2	1.34E+04	1.92E+04	-24	4.23E+03	36
FD	1.19E+04	2.00E+04	-18	4.03E+03	39
L1	17.1	1.97E+04	-38	17.2	-7
L3	6.31E+03	1.91E+04	-11	3.55E+03	52
L4	6.31E+03	1.91E+04	-11	3.55E+03	52
NF	—	—	—	—	—
NS	3.38E+03	2.35E+04	-2	4.85E+03	83

Table G–1238. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.97E+04	1.97E+04	-1.95E+04	1.95E+04
A2	-1.12E+04	2.94E+04	-1.09E+04	2.92E+04
FD	-1.31E+04	2.83E+04	-1.28E+04	2.81E+04
L1	-1.97E+04	1.97E+04	-1.97E+04	1.97E+04
L3	-1.68E+04	2.20E+04	-1.69E+04	2.20E+04
L4	-1.68E+04	2.20E+04	-1.69E+04	2.20E+04
NF	—	—	—	—
NS	-2.49E+04	2.28E+04	-2.47E+04	2.22E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–620. Time history of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
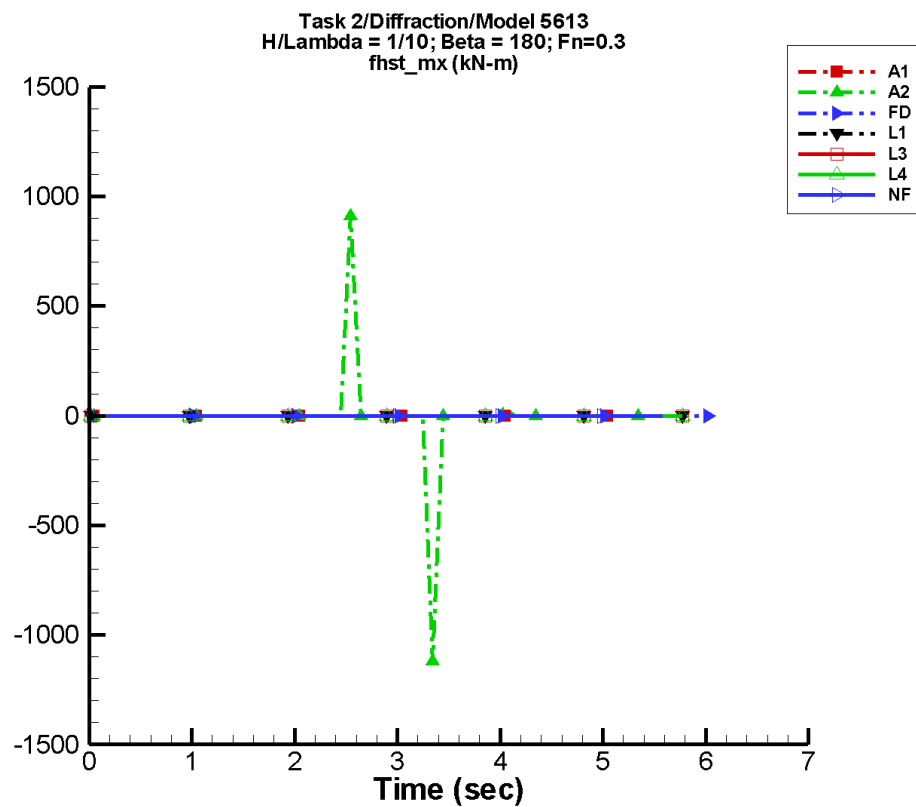
Table G–1239. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-2.32	2.96E+04	-38	18.2	-75
A2	2.63E+04	2.04E+04	-12	4.82E+03	132
FD	2.75E+04	2.07E+04	-9	3.67E+03	137
L1	25.7	2.96E+04	-38	25.7	-7
L3	1.75E+04	1.78E+04	0	4.36E+03	156
L4	1.75E+04	1.78E+04	0	4.36E+03	156
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1240. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.95E+04	2.96E+04	-2.92E+04	2.93E+04
A2	-472.	4.76E+04	3.79E+03	4.60E+04
FD	3.15E+03	4.62E+04	5.46E+03	4.59E+04
L1	-2.96E+04	2.96E+04	-2.95E+04	2.95E+04
L3	-6.44E+03	3.39E+04	-3.84E+03	3.37E+04
L4	-6.44E+03	3.39E+04	-3.84E+03	3.37E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–621. Time history of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
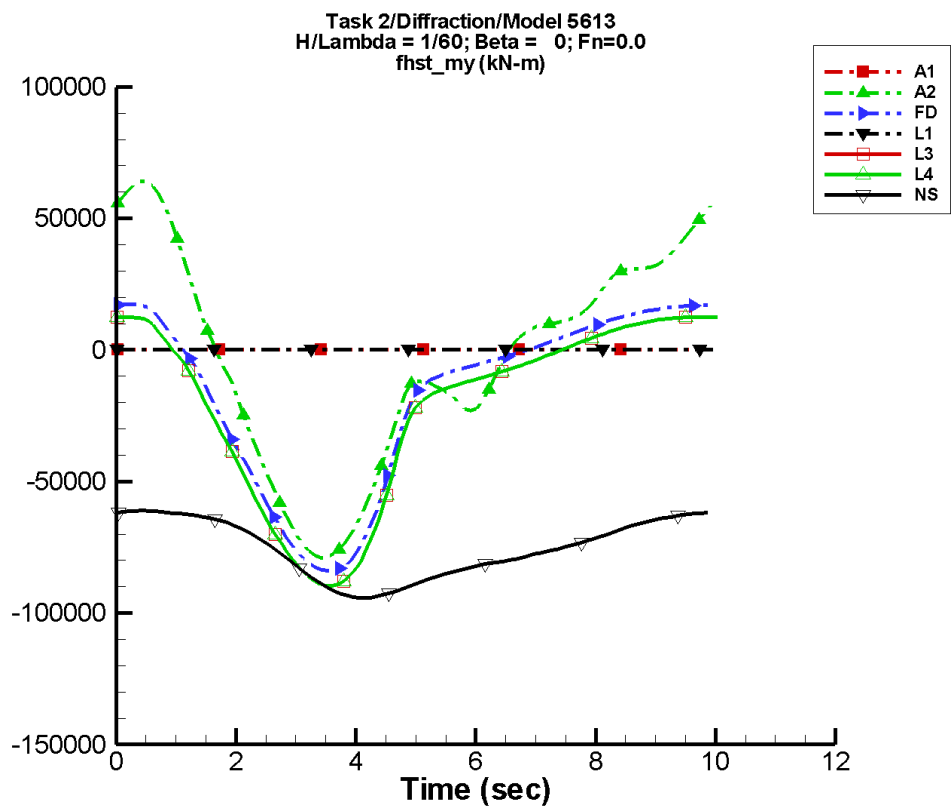
Table G–1241. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
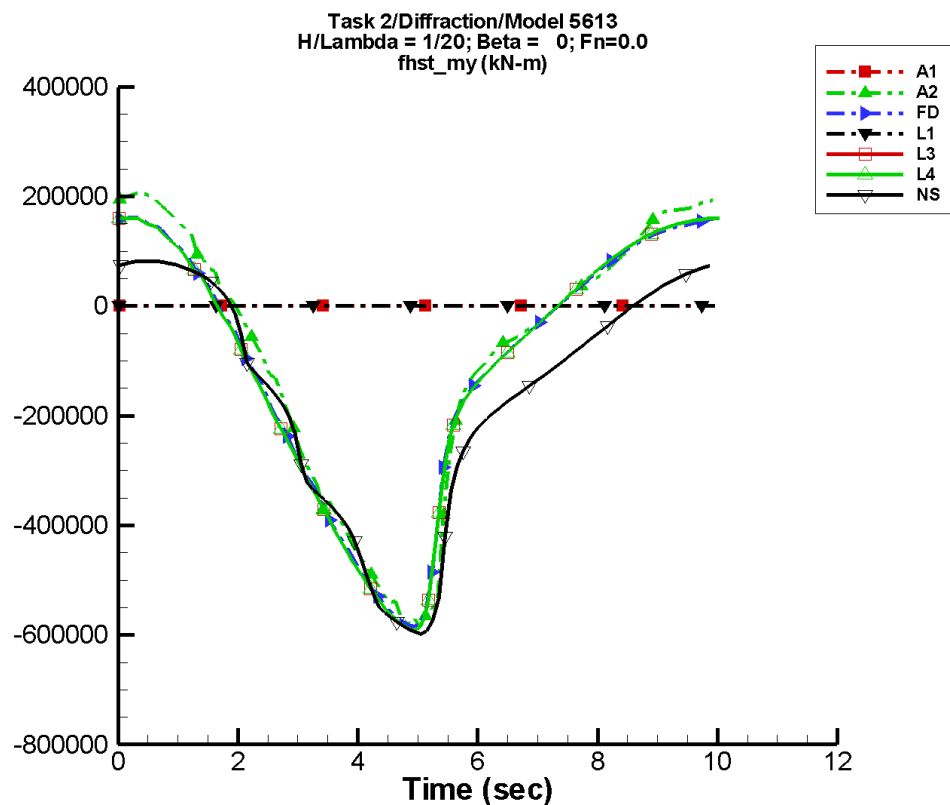
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-0.166	4.91E+03	34	0.233	-2
A2	606.	5.66E+03	30	429.	-159
FD	706.	5.55E+03	24	525.	-149
L1	0.699	4.93E+03	33	3.55	73
L3	81.4	5.58E+03	25	521.	-134
L4	81.4	5.58E+03	25	521.	-134
NF	—	—	—	—	—
NS	-300.	6.45E+03	17	124.	136

Table G–1242. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-4.91E+03	4.91E+03	-4.90E+03	4.90E+03
A2	-5.21E+03	5.99E+03	-5.21E+03	5.99E+03
FD	-4.87E+03	6.13E+03	-4.87E+03	6.13E+03
L1	-4.93E+03	4.93E+03	-4.93E+03	4.93E+03
L3	-5.47E+03	5.62E+03	-5.46E+03	5.62E+03
L4	-5.47E+03	5.62E+03	-5.46E+03	5.62E+03
NF	—	—	—	—
NS	-6.84E+03	6.00E+03	-6.77E+03	5.94E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–622. Time history of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
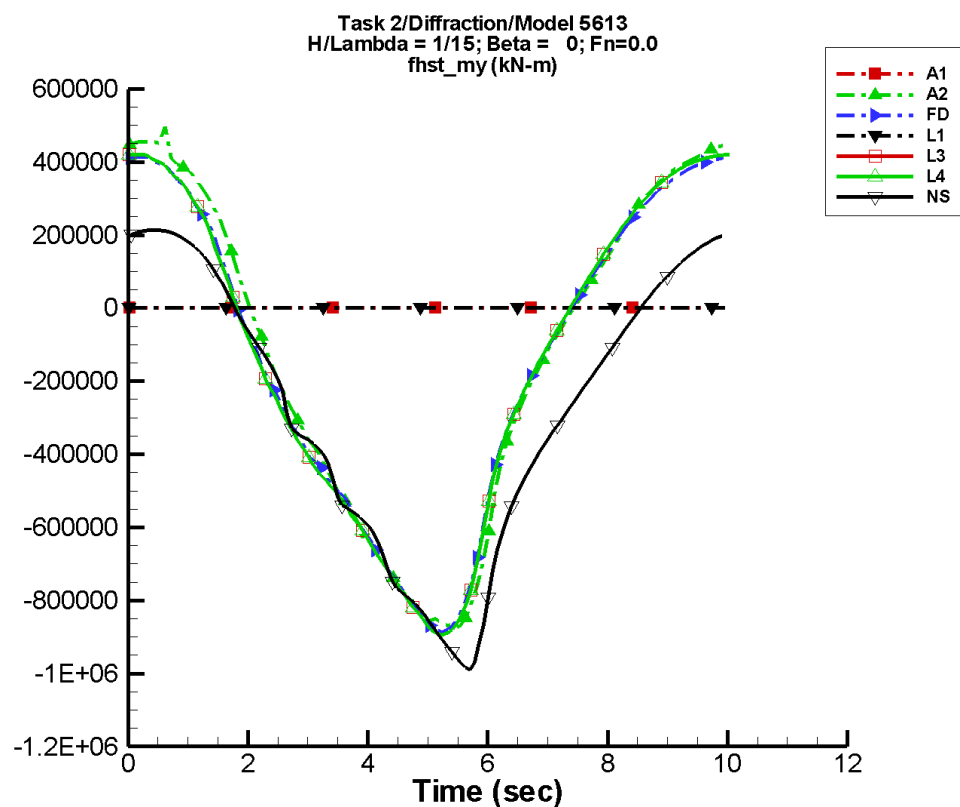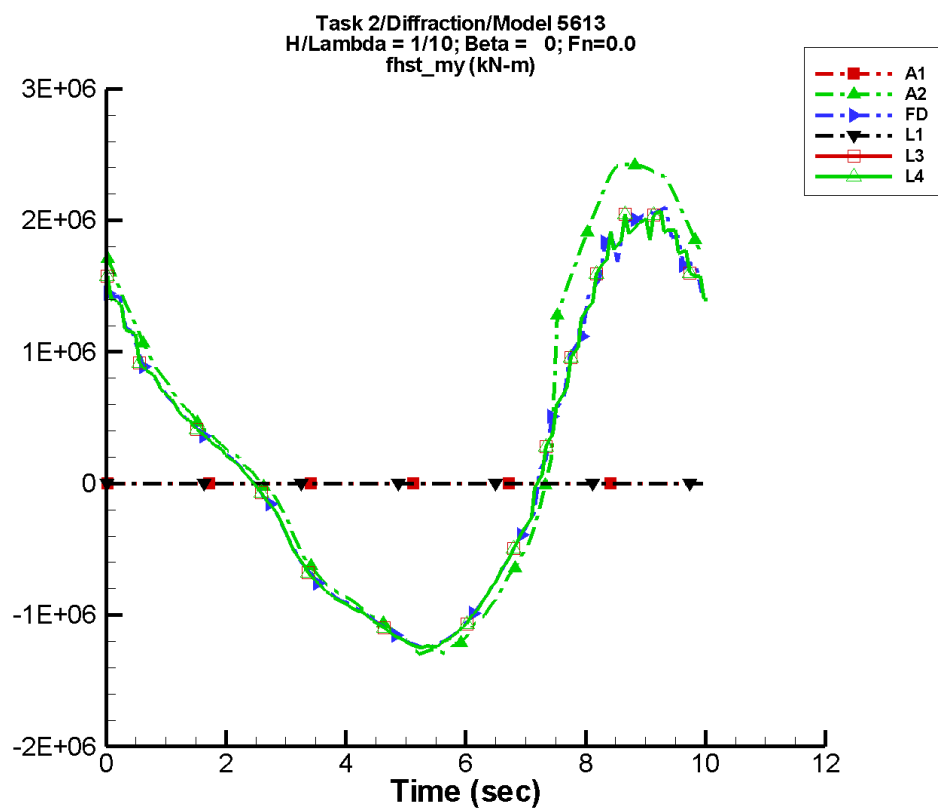
Table G–1243. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-0.498	1.48E+04	34	0.704	-2
A2	6.43E+03	1.74E+04	17	3.12E+03	150
FD	5.45E+03	1.79E+04	11	3.11E+03	155
L1	2.10	1.48E+04	33	10.7	73
L3	1.63E+03	1.78E+04	11	2.89E+03	162
L4	1.63E+03	1.78E+04	11	2.89E+03	162
NF	—	—	—	—	—
NS	566.	1.95E+04	7	3.00E+03	129

Table G–1244. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.48E+04	1.48E+04	-1.47E+04	1.47E+04
A2	-1.34E+04	2.14E+04	-1.34E+04	2.13E+04
FD	-1.44E+04	2.16E+04	-1.43E+04	2.15E+04
L1	-1.48E+04	1.48E+04	-1.48E+04	1.48E+04
L3	-1.75E+04	1.78E+04	-1.75E+04	1.78E+04
L4	-1.75E+04	1.78E+04	-1.75E+04	1.78E+04
NF	—	—	—	—
NS	-2.11E+04	1.77E+04	-2.08E+04	1.74E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–623. Time history of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
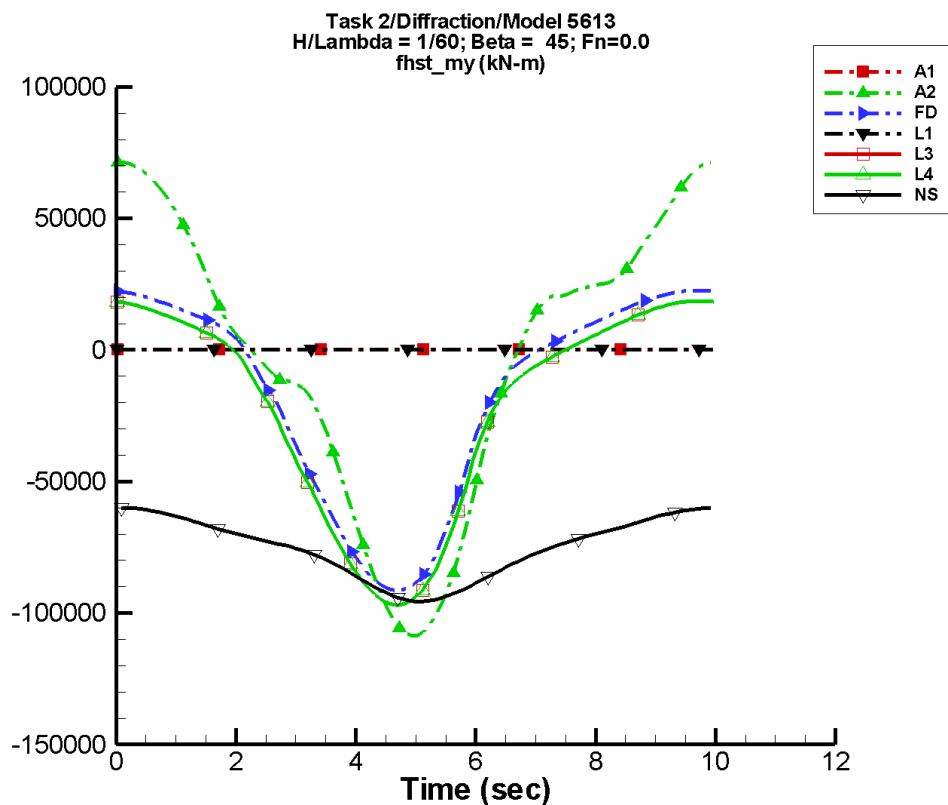
Table G–1245. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-0.664	1.97E+04	34	0.941	-2
A2	1.35E+04	1.93E+04	15	4.03E+03	128
FD	1.18E+04	2.02E+04	8	4.08E+03	120
L1	2.79	1.97E+04	33	14.2	73
L3	6.25E+03	1.93E+04	7	3.81E+03	117
L4	6.25E+03	1.93E+04	7	3.81E+03	117
NF	—	—	—	—	—
NS	3.41E+03	2.34E+04	0	4.73E+03	86

Table G–1246. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.97E+04	1.97E+04	-1.97E+04	1.97E+04
A2	-1.12E+04	2.95E+04	-1.12E+04	2.94E+04
FD	-1.31E+04	2.83E+04	-1.31E+04	2.82E+04
L1	-1.97E+04	1.97E+04	-1.97E+04	1.97E+04
L3	-1.68E+04	2.20E+04	-1.68E+04	2.20E+04
L4	-1.68E+04	2.20E+04	-1.68E+04	2.20E+04
NF	—	—	—	—
NS	-2.49E+04	2.26E+04	-2.46E+04	2.24E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–624. Time history of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
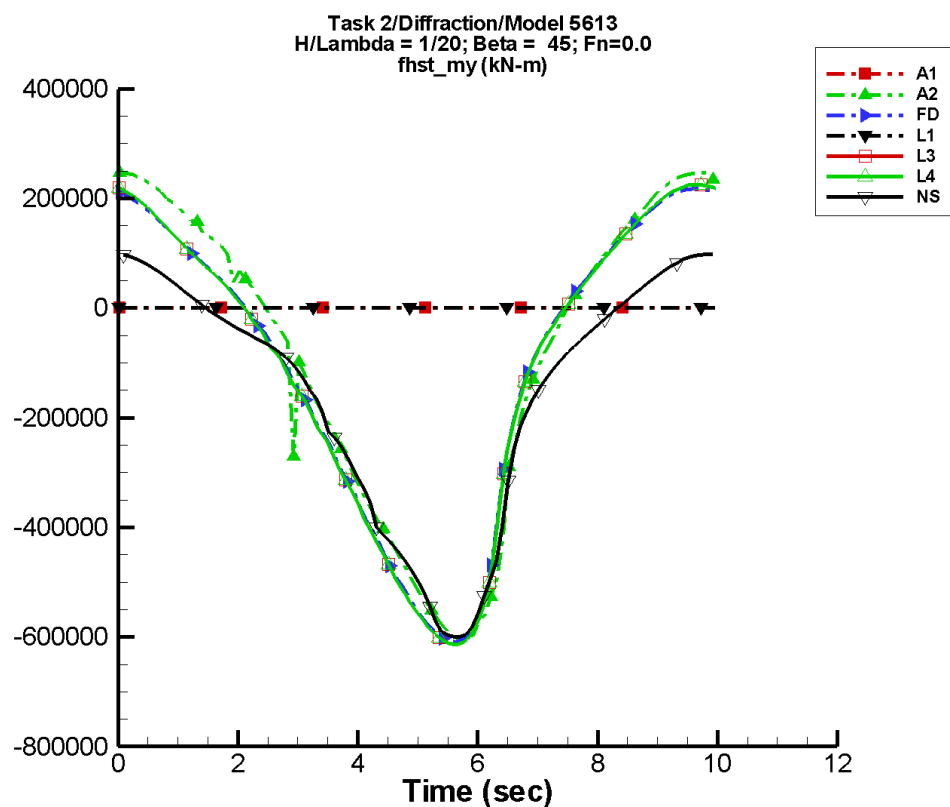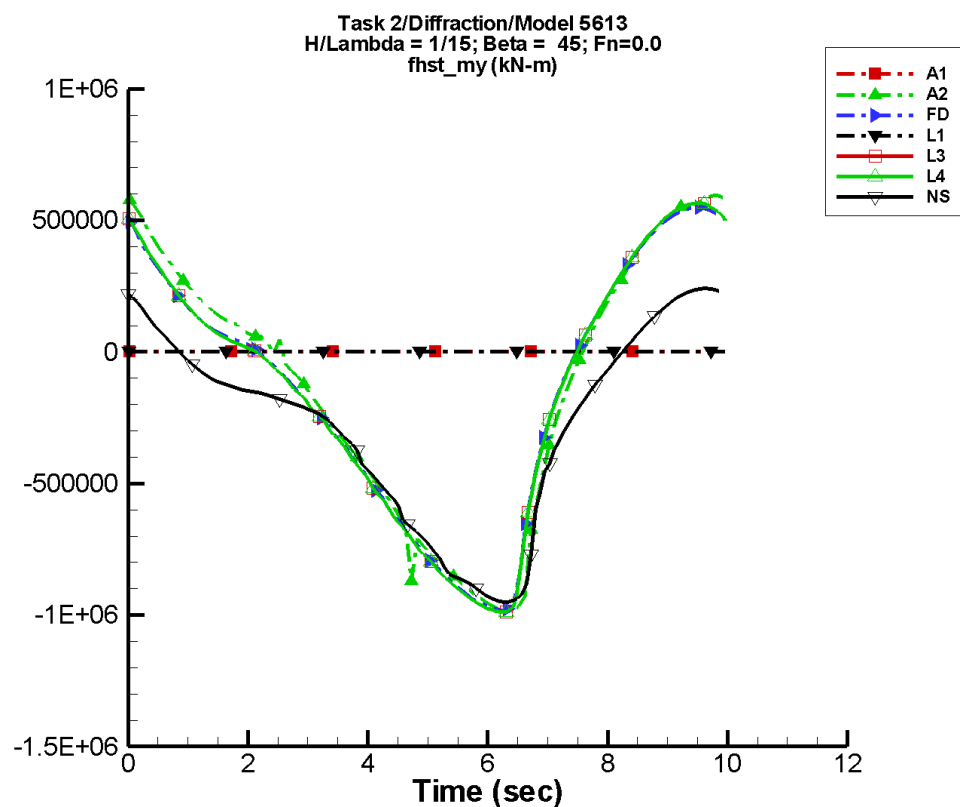
Table G–1247. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-0.998	2.96E+04	34	1.41	-2
A2	2.62E+04	2.01E+04	4	5.52E+03	33
FD	2.75E+04	2.08E+04	1	3.53E+03	33
L1	4.19	2.96E+04	33	21.3	73
L3	1.75E+04	1.78E+04	-2	3.69E+03	17
L4	1.75E+04	1.78E+04	-2	3.69E+03	17
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1248. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.96E+04	2.96E+04	-2.95E+04	2.95E+04
A2	-476.	4.80E+04	3.47E+03	4.74E+04
FD	3.09E+03	4.63E+04	4.64E+03	4.61E+04
L1	-2.96E+04	2.96E+04	-2.96E+04	2.96E+04
L3	-6.44E+03	3.39E+04	-5.42E+03	3.39E+04
L4	-6.44E+03	3.39E+04	-5.42E+03	3.39E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 45; Fn=0.3
ffk_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–625. Time history of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
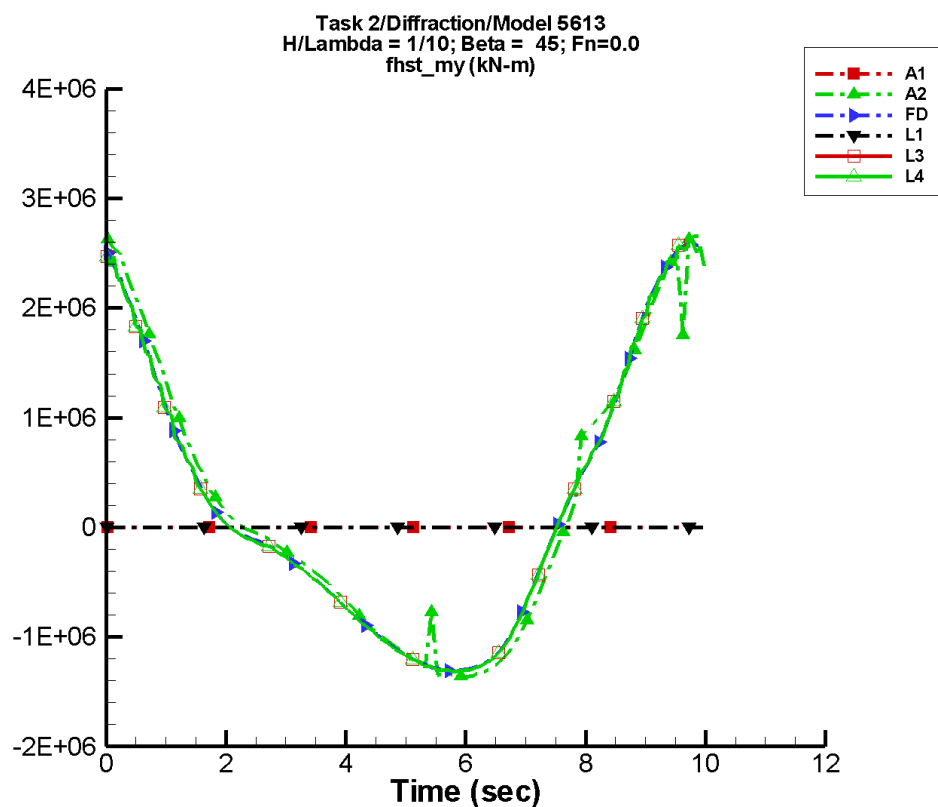
Table G–1249. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	3.85	1.27E+04	19	5.48	175
A2	618.	1.25E+04	16	743.	120
FD	709.	1.25E+04	20	577.	139
L1	2.40	1.27E+04	20	3.53	170
L3	79.7	1.25E+04	16	544.	136
L4	79.7	1.25E+04	16	544.	136
NF	—	—	—	—	—
NS	-280.	1.27E+04	14	239.	117

Table G–1250. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.27E+04	1.27E+04	-1.27E+04	1.27E+04
A2	-1.26E+04	1.24E+04	-1.26E+04	1.24E+04
FD	-1.23E+04	1.26E+04	-1.23E+04	1.26E+04
L1	-1.27E+04	1.27E+04	-1.27E+04	1.27E+04
L3	-1.29E+04	1.20E+04	-1.29E+04	1.20E+04
L4	-1.29E+04	1.20E+04	-1.29E+04	1.20E+04
NF	—	—	—	—
NS	-1.32E+04	1.22E+04	-1.31E+04	1.21E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–626. Time history of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
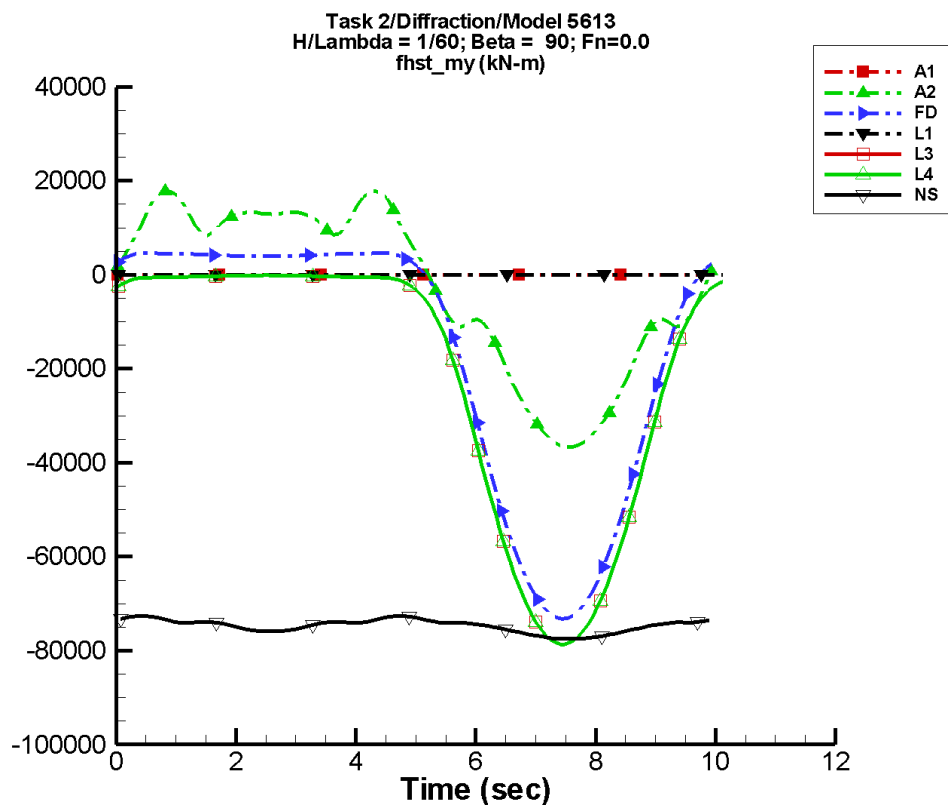
Table G–1251. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	11.6	3.82E+04	19	16.5	175
A2	6.43E+03	3.37E+04	10	3.76E+03	91
FD	5.39E+03	3.47E+04	14	3.79E+03	108
L1	7.21	3.81E+04	20	10.6	170
L3	1.59E+03	3.33E+04	9	3.55E+03	101
L4	1.59E+03	3.33E+04	9	3.55E+03	101
NF	—	—	—	—	—
NS	-1.86E+03	3.67E+04	6	1.96E+03	90

Table G–1252. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
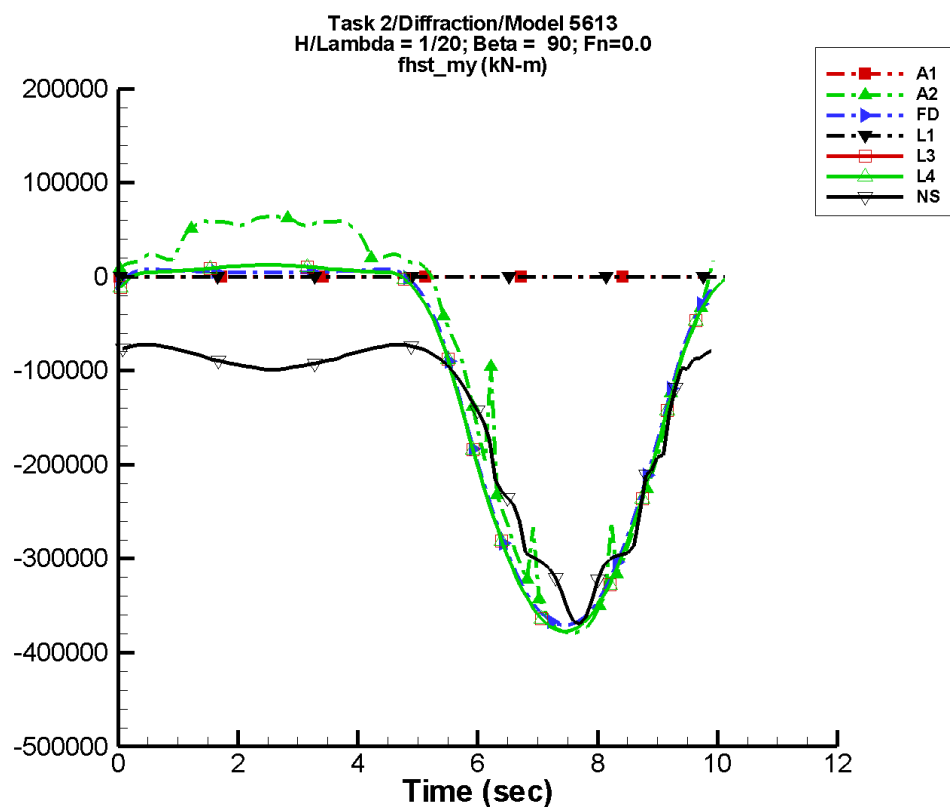
Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-3.82E+04	3.82E+04	-3.81E+04	3.81E+04
A2	-3.22E+04	3.70E+04	-3.21E+04	3.69E+04
FD	-3.43E+04	3.67E+04	-3.41E+04	3.66E+04
L1	-3.81E+04	3.81E+04	-3.81E+04	3.81E+04
L3	-3.66E+04	3.18E+04	-3.66E+04	3.18E+04
L4	-3.66E+04	3.18E+04	-3.66E+04	3.18E+04
NF	—	—	—	—
NS	-4.08E+04	3.34E+04	-4.03E+04	3.33E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–627. Time history of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
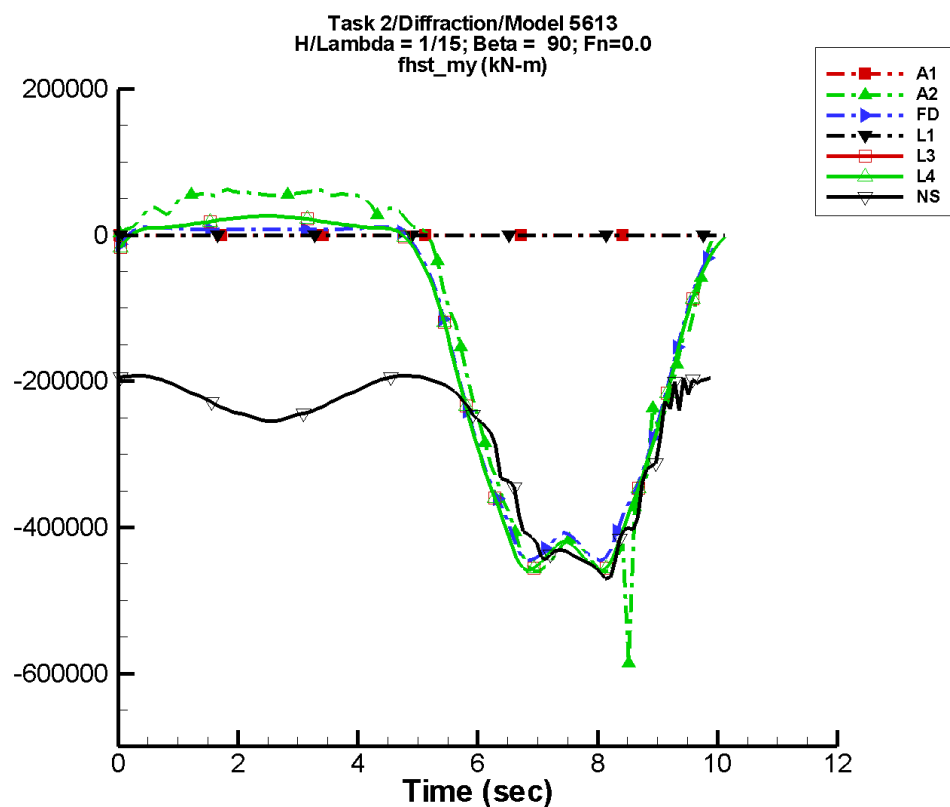
Table G–1253. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	15.5	5.10E+04	19	22.0	175
A2	1.34E+04	3.74E+04	10	3.84E+03	83
FD	1.18E+04	3.93E+04	13	4.38E+03	96
L1	9.61	5.09E+04	20	14.1	170
L3	6.25E+03	3.58E+04	7	3.83E+03	86
L4	6.25E+03	3.58E+04	7	3.83E+03	86
NF	—	—	—	—	—
NS	-1.90E+03	4.66E+04	4	4.05E+03	79

Table G–1254. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-5.10E+04	5.10E+04	-5.09E+04	5.09E+04
A2	-3.12E+04	4.88E+04	-3.10E+04	4.86E+04
FD	-3.56E+04	4.80E+04	-3.54E+04	4.79E+04
L1	-5.09E+04	5.09E+04	-5.08E+04	5.08E+04
L3	-3.73E+04	3.97E+04	-3.72E+04	3.96E+04
L4	-3.73E+04	3.97E+04	-3.72E+04	3.96E+04
NF	—	—	—	—
NS	-5.38E+04	4.19E+04	-5.34E+04	4.19E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–628. Time history of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
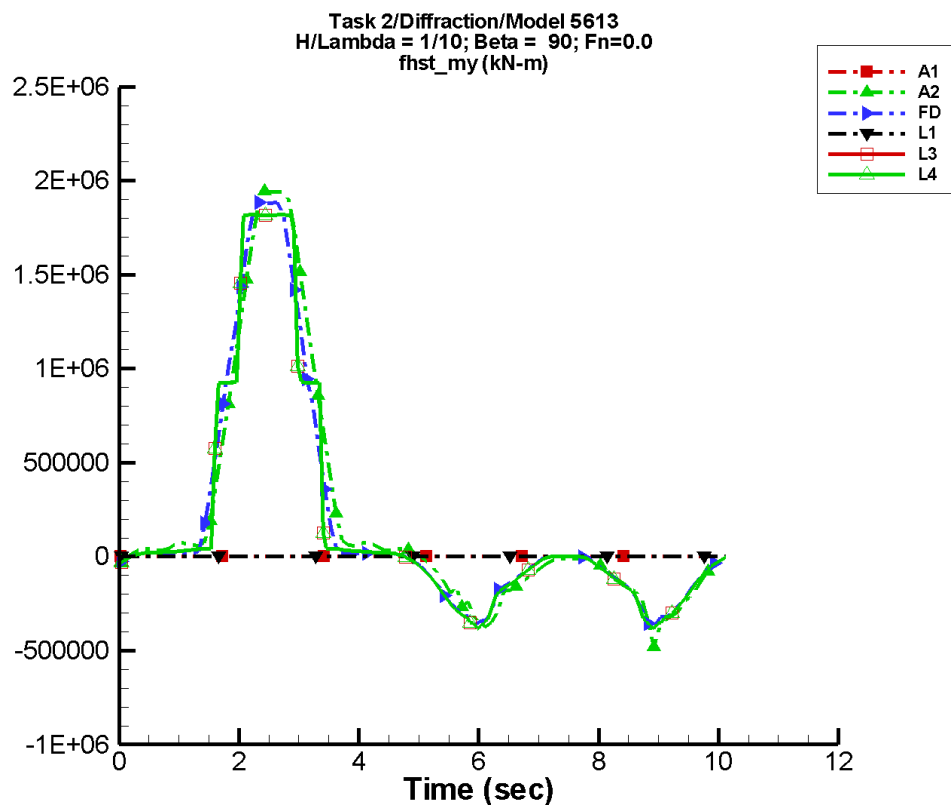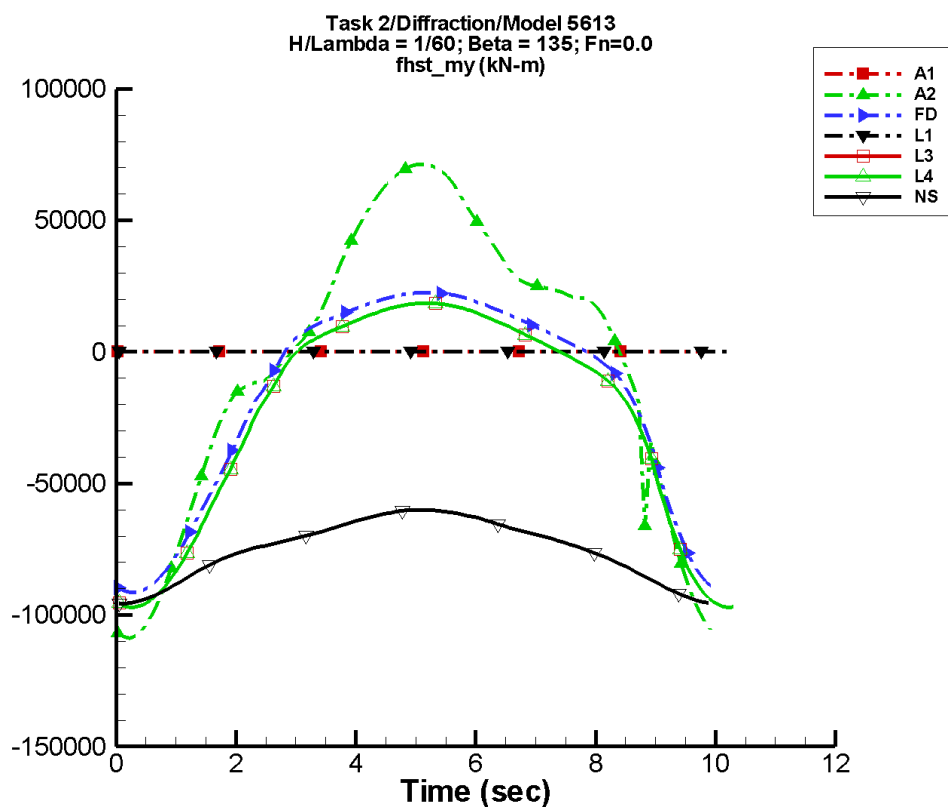
Table G–1255. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	23.2	7.65E+04	19	33.0	175
A2	2.59E+04	3.46E+04	1	8.50E+03	-80
FD	2.72E+04	3.64E+04	8	6.41E+03	-74
L1	14.4	7.63E+04	20	21.2	170
L3	1.73E+04	2.88E+04	-1	7.34E+03	-81
L4	1.73E+04	2.88E+04	-1	7.34E+03	-81
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1256. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-7.65E+04	7.65E+04	-7.63E+04	7.63E+04
A2	-5.79E+03	6.73E+04	-5.58E+03	6.69E+04
FD	-6.89E+03	6.76E+04	-6.71E+03	6.75E+04
L1	-7.63E+04	7.63E+04	-7.62E+04	7.62E+04
L3	-8.37E+03	5.05E+04	-7.95E+03	5.05E+04
L4	-8.37E+03	5.05E+04	-7.95E+03	5.05E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.3
ffk_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–629. Time history of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1257. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
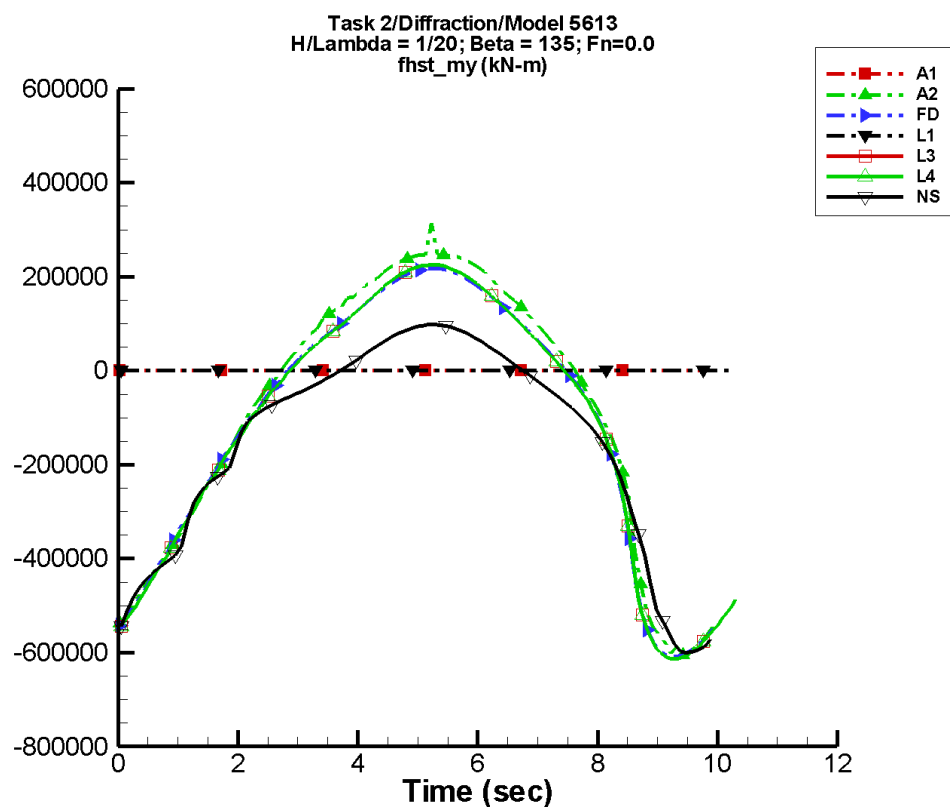
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-15.7	2.49E+04	-4	23.8	-25
A2	610.	2.29E+04	-8	519.	-102
FD	734.	2.30E+04	-8	603.	-108
L1	-10.3	2.48E+04	-4	16.3	-37
L3	65.5	2.28E+04	-4	50.6	-37
L4	65.5	2.28E+04	-4	50.6	-37
NF	—	—	—	—	—
NS	-323.	2.18E+04	-2	159.	-88

Table G–1258. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.49E+04	2.49E+04	-2.46E+04	2.46E+04
A2	-2.15E+04	2.38E+04	-2.13E+04	2.36E+04
FD	-2.14E+04	2.41E+04	-2.14E+04	2.38E+04
L1	-2.48E+04	2.48E+04	-2.47E+04	2.48E+04
L3	-2.24E+04	2.27E+04	-2.23E+04	2.26E+04
L4	-2.24E+04	2.27E+04	-2.23E+04	2.26E+04
NF	—	—	—	—
NS	-2.19E+04	2.16E+04	-2.17E+04	2.14E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–630. Time history of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
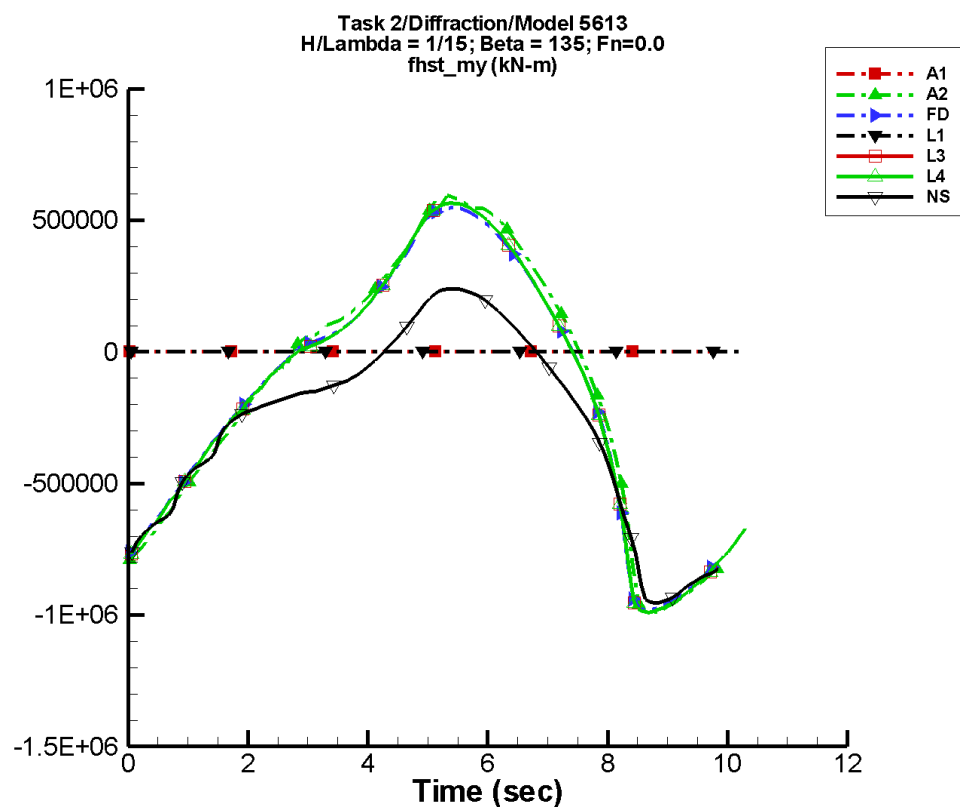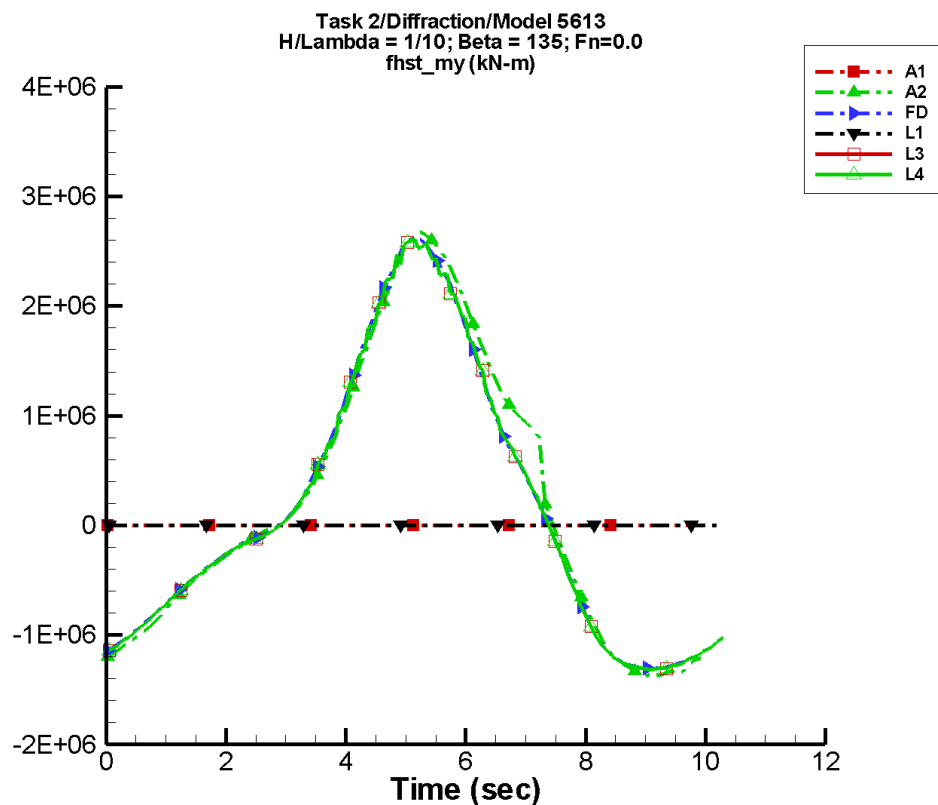
Table G–1259. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-47.3	7.48E+04	-4	71.7	-25
A2	6.51E+03	5.76E+04	-8	5.84E+03	-104
FD	5.56E+03	5.90E+04	-7	4.44E+03	-108
L1	-30.8	7.45E+04	-4	49.0	-37
L3	1.56E+03	5.57E+04	-4	1.18E+03	-82
L4	1.56E+03	5.57E+04	-4	1.18E+03	-82
NF	—	—	—	—	—
NS	2.99	5.53E+04	-1	4.24E+03	-95

Table G–1260. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-7.48E+04	7.48E+04	-7.41E+04	7.40E+04
A2	-4.22E+04	6.82E+04	-4.20E+04	6.71E+04
FD	-4.71E+04	6.71E+04	-4.72E+04	6.65E+04
L1	-7.45E+04	7.45E+04	-7.42E+04	7.43E+04
L3	-4.93E+04	5.64E+04	-4.92E+04	5.63E+04
L4	-4.93E+04	5.64E+04	-4.92E+04	5.63E+04
NF	—	—	—	—
NS	-4.86E+04	5.77E+04	-4.81E+04	5.74E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–631. Time history of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
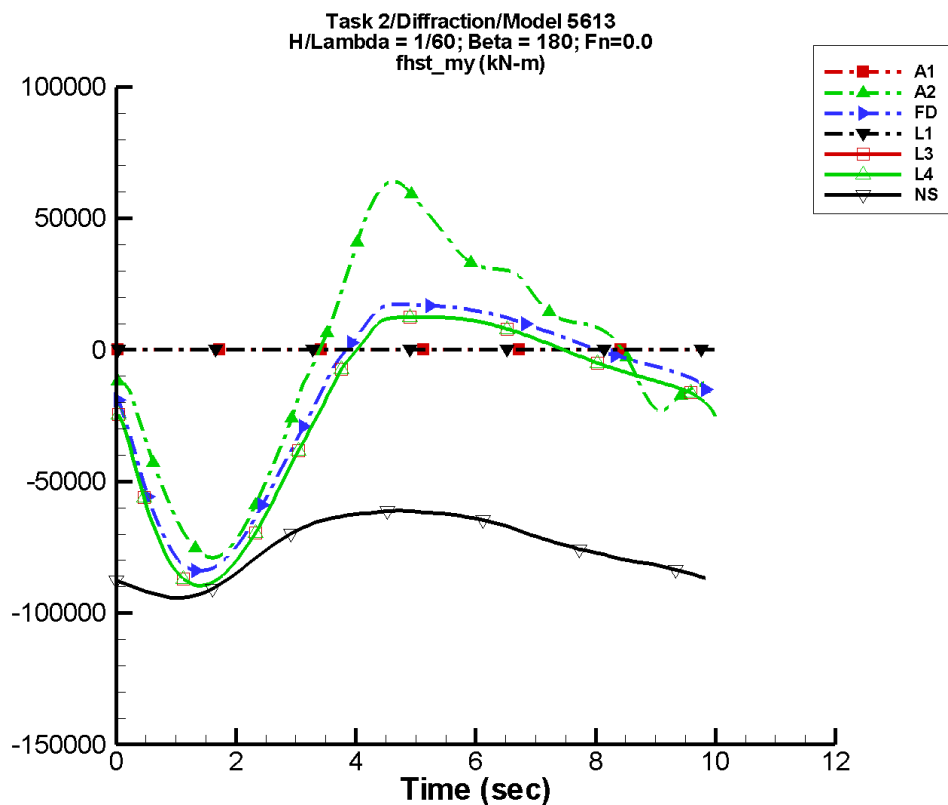
Table G–1261. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-63.1	9.99E+04	-4	95.7	-25
A2	1.37E+04	6.47E+04	-7	1.31E+04	-104
FD	1.25E+04	6.70E+04	-7	1.17E+04	-110
L1	-41.1	9.94E+04	-4	65.4	-37
L3	6.30E+03	6.00E+04	-3	6.53E+03	-91
L4	6.30E+03	6.00E+04	-3	6.53E+03	-91
NF	—	—	—	—	—
NS	1.53E+03	6.10E+04	-1	9.09E+03	-94

Table G–1262. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-9.99E+04	9.99E+04	-9.89E+04	9.88E+04
A2	-3.99E+04	8.63E+04	-3.86E+04	8.52E+04
FD	-4.43E+04	8.62E+04	-4.34E+04	8.54E+04
L1	-9.93E+04	9.94E+04	-9.90E+04	9.90E+04
L3	-4.64E+04	6.80E+04	-4.59E+04	6.78E+04
L4	-4.64E+04	6.80E+04	-4.59E+04	6.78E+04
NF	—	—	—	—
NS	-5.02E+04	6.76E+04	-4.96E+04	6.76E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–632. Time history of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
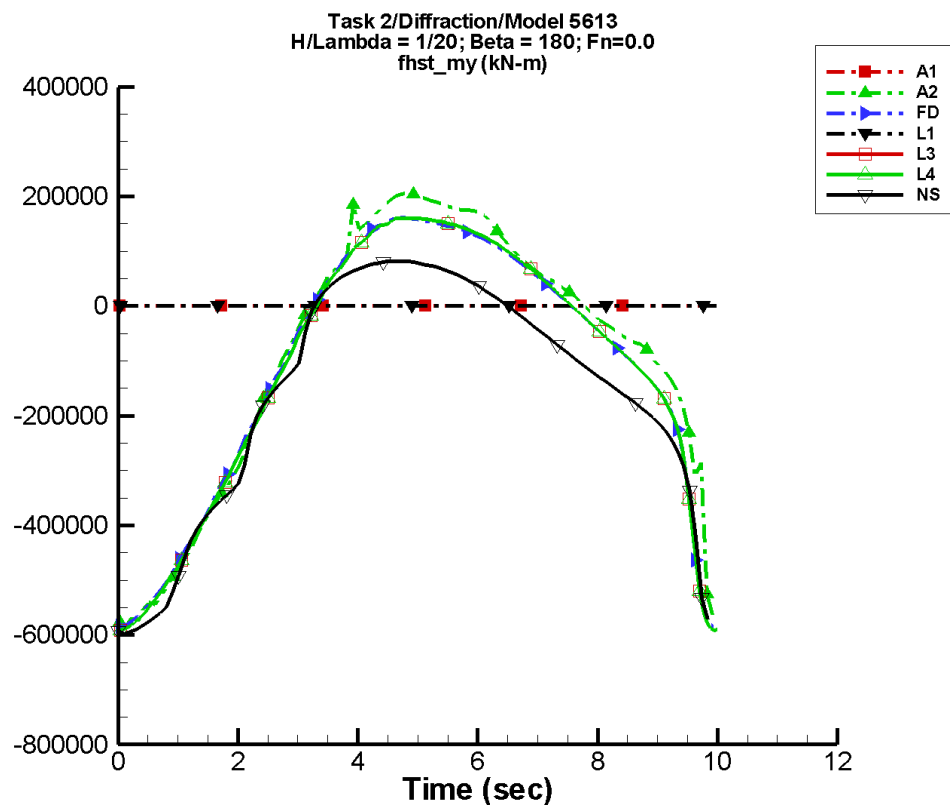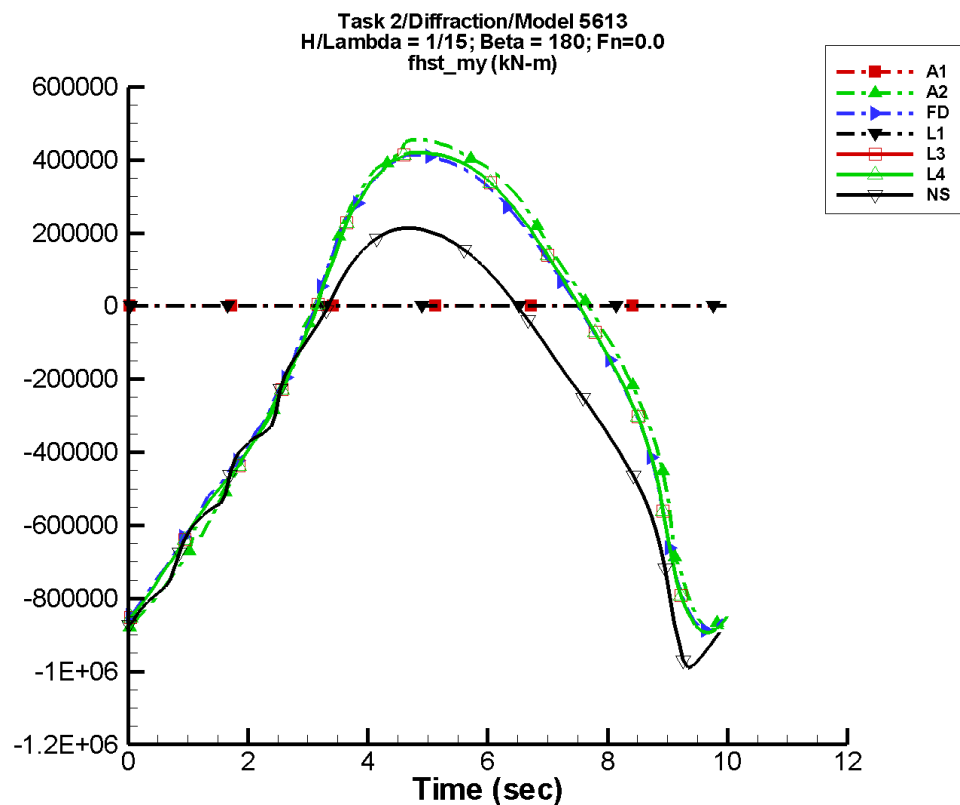
Table G–1263. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-94.7	1.50E+05	-4	144.	-25
A2	2.69E+04	5.49E+04	-6	1.81E+04	-97
FD	2.86E+04	5.83E+04	-5	2.11E+04	-110
L1	-61.6	1.49E+05	-4	98.0	-37
L3	1.71E+04	4.19E+04	0	1.11E+04	-83
L4	1.71E+04	4.19E+04	0	1.11E+04	-83
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1264. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.50E+05	1.50E+05	-1.48E+05	1.48E+05
A2	-3.39E+04	9.33E+04	-2.99E+04	8.84E+04
FD	-3.84E+04	9.53E+04	-3.31E+04	9.29E+04
L1	-1.49E+05	1.49E+05	-1.48E+05	1.49E+05
L3	-3.94E+04	7.55E+04	-3.82E+04	7.03E+04
L4	-3.94E+04	7.55E+04	-3.82E+04	7.03E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.3
ffk_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–633. Time history of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
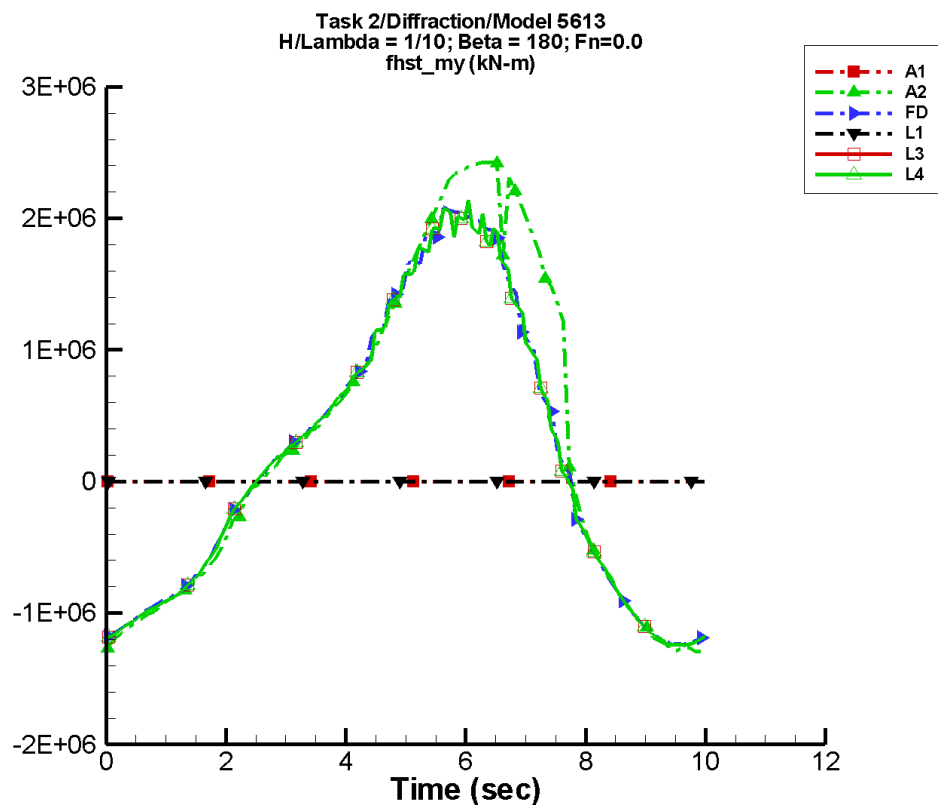
Table G–1265. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-3.56	1.27E+04	-21	5.62	-30
A2	608.	1.25E+04	-24	779.	43
FD	711.	1.25E+04	-13	591.	53
L1	-1.24	1.27E+04	-22	1.97	-51
L3	79.7	1.25E+04	-18	564.	40
L4	79.7	1.25E+04	-18	564.	40
NF	—	—	—	—	—
NS	-301.	1.27E+04	-11	138.	71

Table G–1266. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.27E+04	1.27E+04	-1.24E+04	1.24E+04
A2	-1.26E+04	1.24E+04	-1.23E+04	1.21E+04
FD	-1.23E+04	1.26E+04	-1.20E+04	1.24E+04
L1	-1.27E+04	1.27E+04	-1.26E+04	1.26E+04
L3	-1.29E+04	1.20E+04	-1.28E+04	1.19E+04
L4	-1.29E+04	1.20E+04	-1.28E+04	1.19E+04
NF	—	—	—	—
NS	-1.32E+04	1.23E+04	-1.31E+04	1.22E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–634. Time history of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
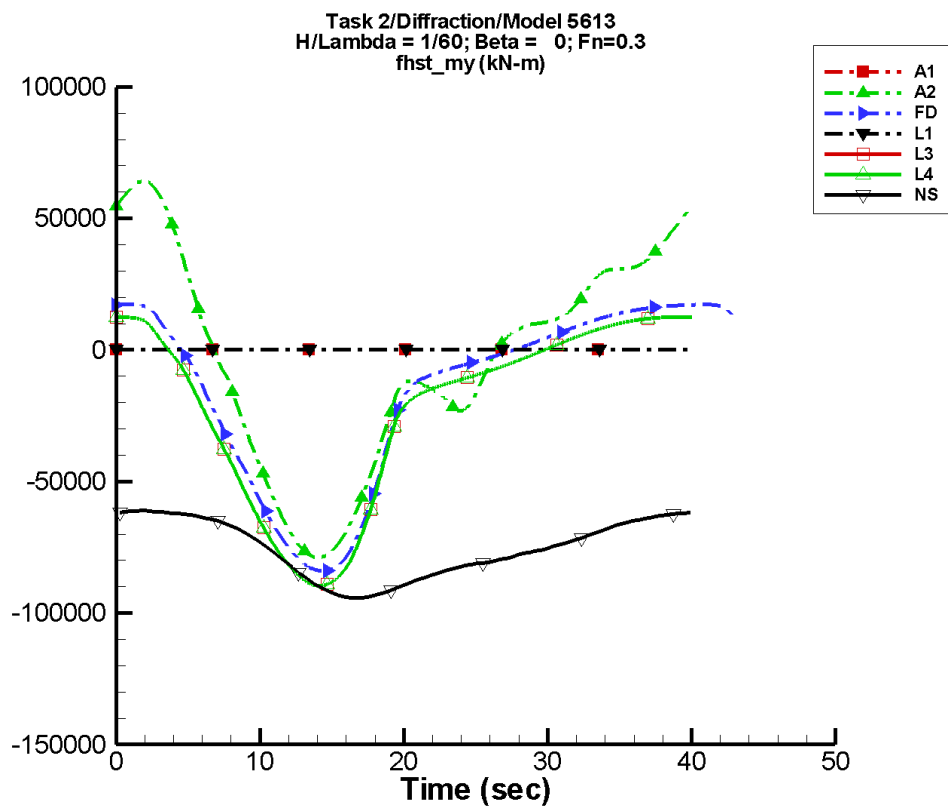
Table G–1267. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-10.7	3.82E+04	-21	16.9	-30
A2	6.37E+03	3.37E+04	-19	3.76E+03	72
FD	5.33E+03	3.46E+04	-7	3.84E+03	86
L1	-3.72	3.81E+04	-22	5.91	-51
L3	1.56E+03	3.33E+04	-11	3.55E+03	76
L4	1.56E+03	3.33E+04	-11	3.55E+03	76
NF	—	—	—	—	—
NS	378.	3.41E+04	-7	3.11E+03	91

Table G–1268. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
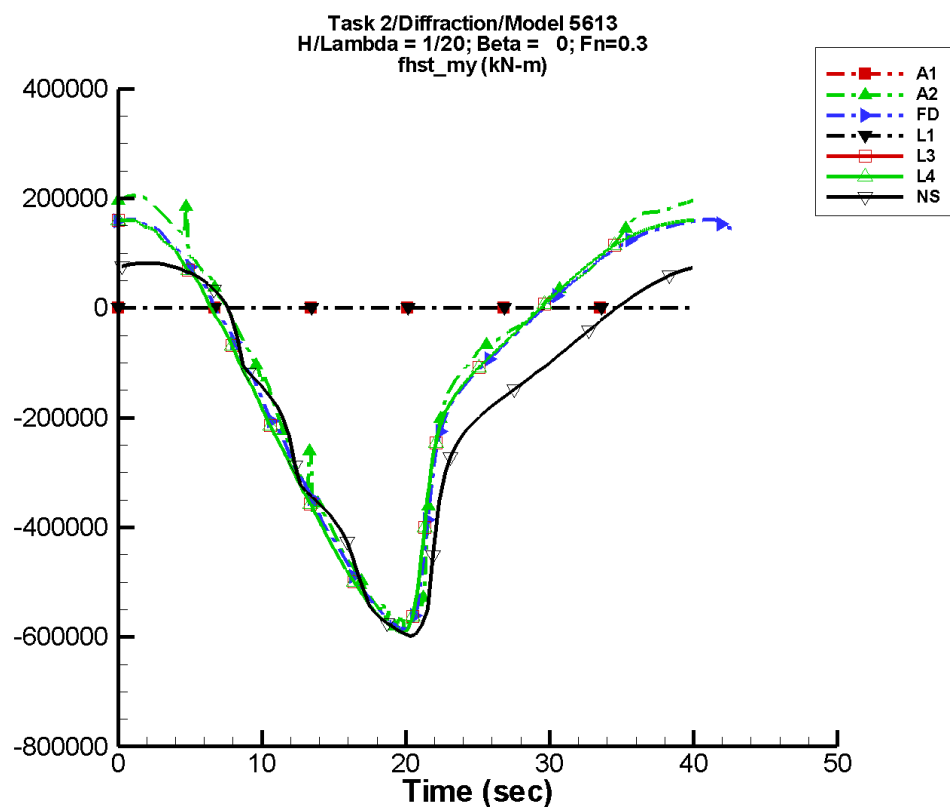
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-3.82E+04	3.82E+04	-3.73E+04	3.73E+04
A2	-3.22E+04	3.69E+04	-3.09E+04	3.65E+04
FD	-3.43E+04	3.67E+04	-3.29E+04	3.62E+04
L1	-3.81E+04	3.81E+04	-3.78E+04	3.78E+04
L3	-3.66E+04	3.18E+04	-3.62E+04	3.17E+04
L4	-3.66E+04	3.18E+04	-3.62E+04	3.17E+04
NF	—	—	—	—
NS	-3.76E+04	3.25E+04	-3.71E+04	3.21E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.3
ffk_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–635. Time history of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
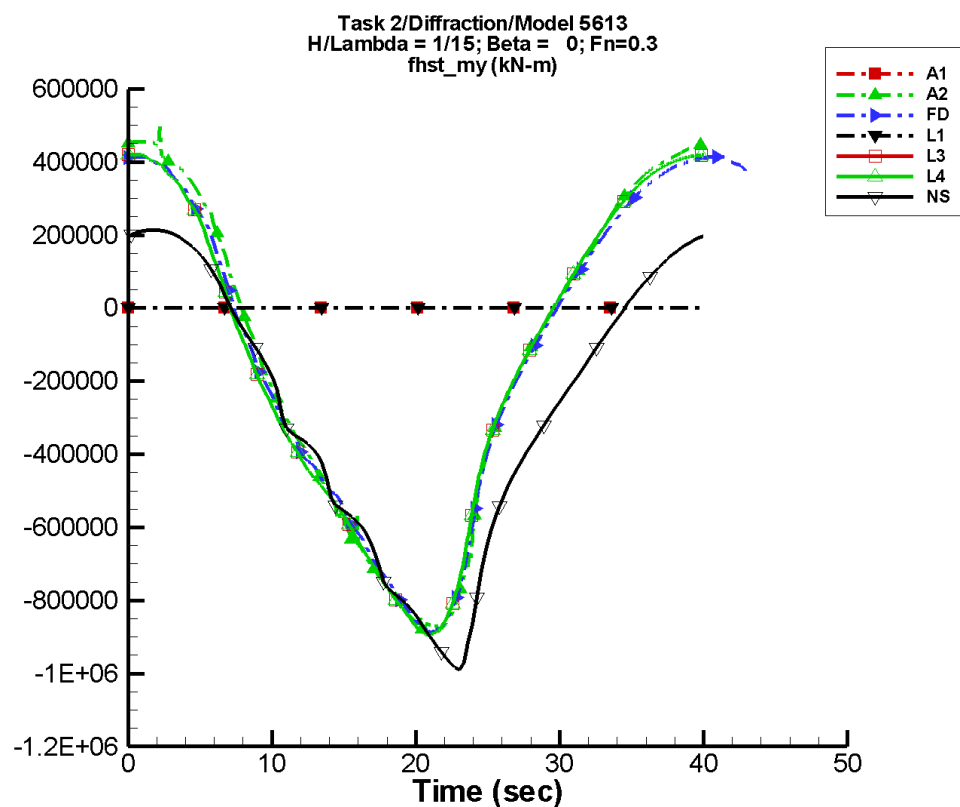
Table G–1269. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-14.3	5.10E+04	-21	22.6	-30
A2	1.34E+04	3.76E+04	-20	3.65E+03	84
FD	1.18E+04	3.93E+04	-7	4.43E+03	101
L1	-4.95	5.09E+04	-22	7.87	-51
L3	6.22E+03	3.59E+04	-10	3.72E+03	93
L4	6.22E+03	3.59E+04	-10	3.72E+03	93
NF	—	—	—	—	—
NS	2.98E+03	3.83E+04	-1	3.05E+03	128

Table G–1270. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-5.10E+04	5.10E+04	-4.98E+04	4.98E+04
A2	-3.12E+04	4.87E+04	-2.87E+04	4.78E+04
FD	-3.56E+04	4.80E+04	-3.30E+04	4.72E+04
L1	-5.09E+04	5.09E+04	-5.04E+04	5.04E+04
L3	-3.73E+04	3.96E+04	-3.66E+04	3.94E+04
L4	-3.73E+04	3.96E+04	-3.66E+04	3.94E+04
NF	—	—	—	—
NS	-4.11E+04	4.08E+04	-4.06E+04	4.05E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–636. Time history of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
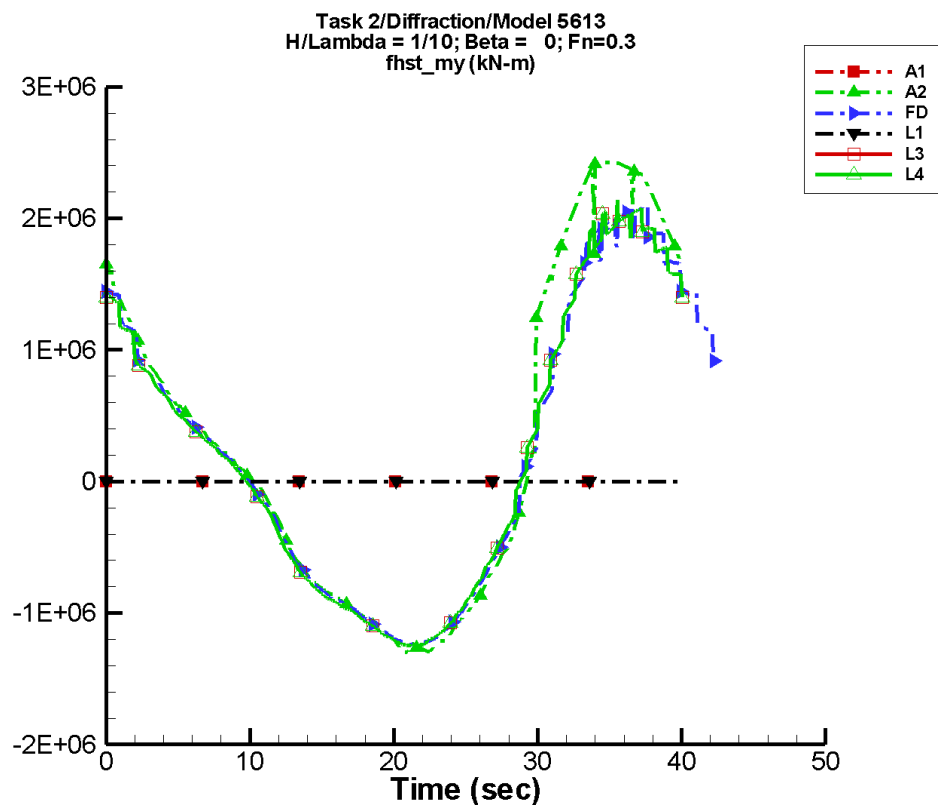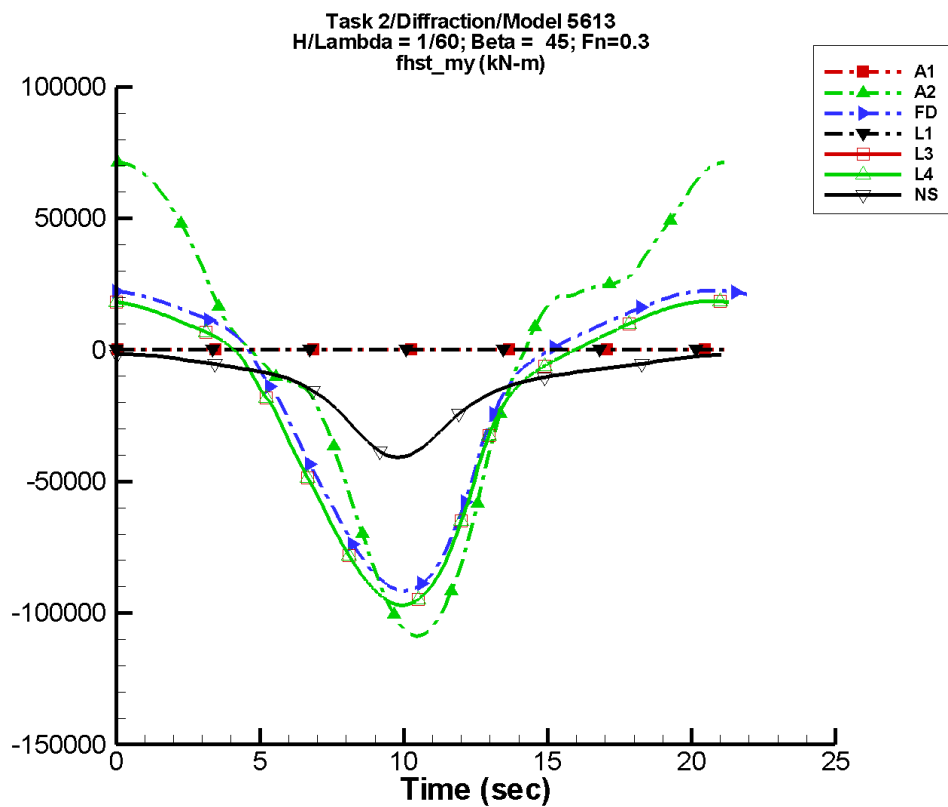
Table G–1271. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-21.5	7.65E+04	-21	33.9	-30
A2	2.57E+04	3.35E+04	-10	6.84E+03	-114
FD	2.73E+04	3.62E+04	-1	5.87E+03	-86
L1	-7.44	7.63E+04	-22	11.8	-51
L3	1.75E+04	2.86E+04	-2	6.55E+03	-104
L4	1.75E+04	2.86E+04	-2	6.55E+03	-104
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1272. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-7.65E+04	7.65E+04	-7.47E+04	7.47E+04
A2	-5.77E+03	6.70E+04	-4.53E+03	6.56E+04
FD	-6.83E+03	6.75E+04	-5.59E+03	6.74E+04
L1	-7.63E+04	7.63E+04	-7.56E+04	7.56E+04
L3	-8.29E+03	5.05E+04	-7.64E+03	5.03E+04
L4	-8.29E+03	5.05E+04	-7.64E+03	5.03E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 180; Fn=0.3
ffk_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–637. Time history of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
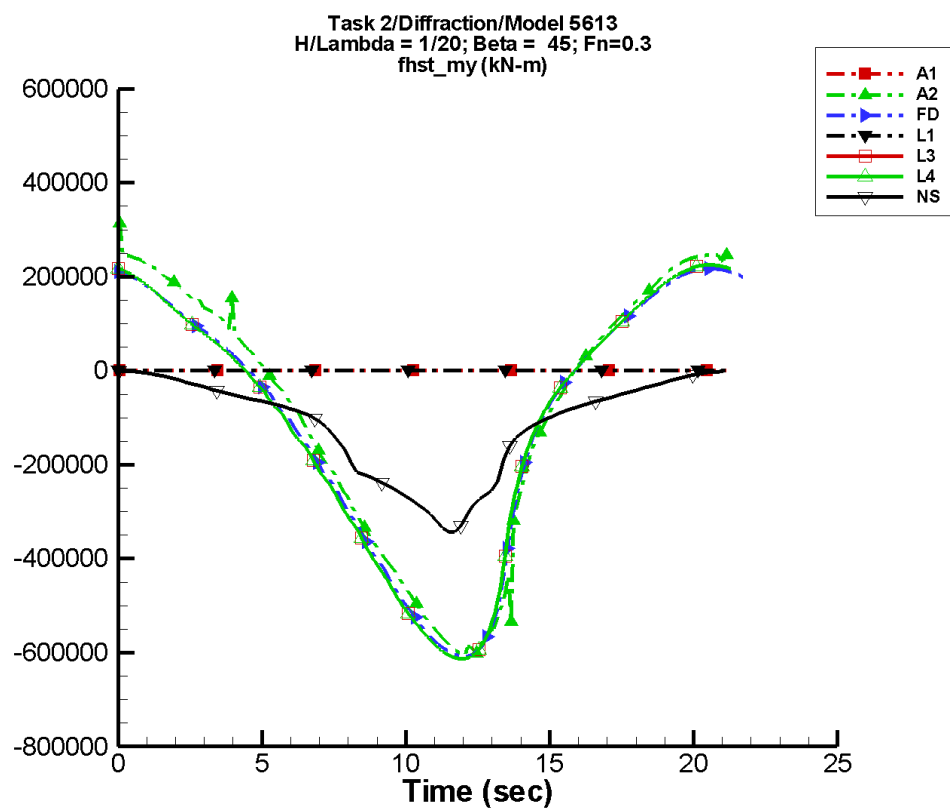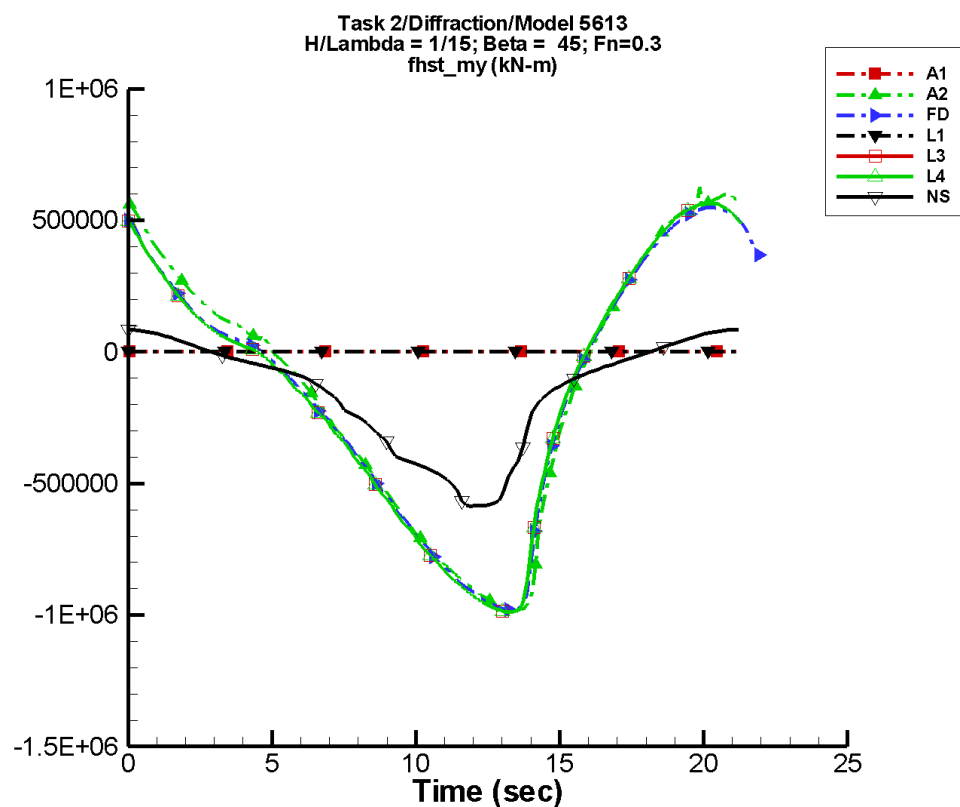
Table G–1273. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-2.21	4.90E+03	-42	3.56	-50
A2	601.	5.68E+03	-45	468.	-56
FD	698.	5.55E+03	-62	517.	-111
L1	7.89	4.93E+03	-49	8.28	-28
L3	84.5	5.59E+03	-41	504.	-75
L4	84.5	5.59E+03	-41	504.	-75
NF	—	—	—	—	—
NS	-297.	6.45E+03	-22	137.	21

Table G–1274. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-4.90E+03	4.91E+03	-4.75E+03	4.76E+03
A2	-5.20E+03	5.98E+03	-5.00E+03	5.83E+03
FD	-4.87E+03	6.13E+03	-4.70E+03	5.96E+03
L1	-4.93E+03	4.93E+03	-4.88E+03	4.88E+03
L3	-5.47E+03	5.62E+03	-5.41E+03	5.56E+03
L4	-5.47E+03	5.62E+03	-5.41E+03	5.56E+03
NF	—	—	—	—
NS	-6.84E+03	6.00E+03	-6.78E+03	5.94E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 180; Fn=0.3
ffk_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–638. Time history of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
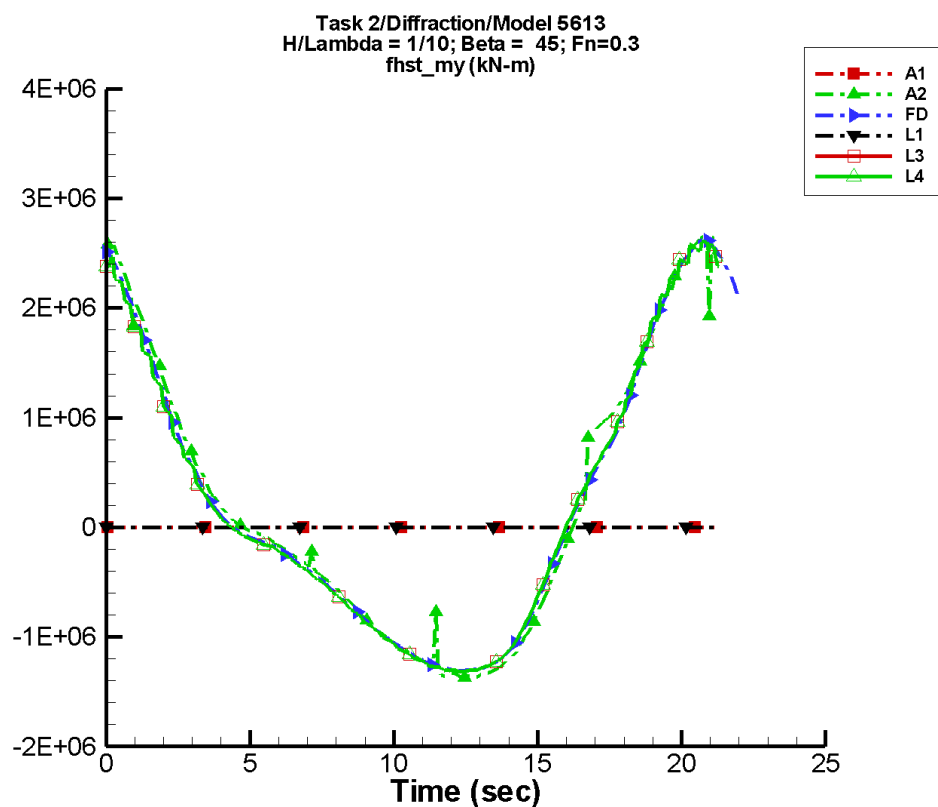
Table G–1275. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-6.65	1.48E+04	-42	10.7	-50
A2	6.44E+03	1.73E+04	-32	3.26E+03	4
FD	5.48E+03	1.79E+04	-48	3.28E+03	-53
L1	23.7	1.48E+04	-49	24.8	-28
L3	1.70E+03	1.76E+04	-26	2.71E+03	-11
L4	1.70E+03	1.76E+04	-26	2.71E+03	-11
NF	—	—	—	—	—
NS	592.	1.95E+04	-12	3.26E+03	38

Table G–1276. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.47E+04	1.48E+04	-1.43E+04	1.43E+04
A2	-1.34E+04	2.13E+04	-1.29E+04	2.15E+04
FD	-1.43E+04	2.15E+04	-1.39E+04	2.11E+04
L1	-1.48E+04	1.48E+04	-1.46E+04	1.46E+04
L3	-1.75E+04	1.78E+04	-1.73E+04	1.76E+04
L4	-1.75E+04	1.78E+04	-1.73E+04	1.76E+04
NF	—	—	—	—
NS	-2.11E+04	1.77E+04	-2.09E+04	1.74E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–639. Time history of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
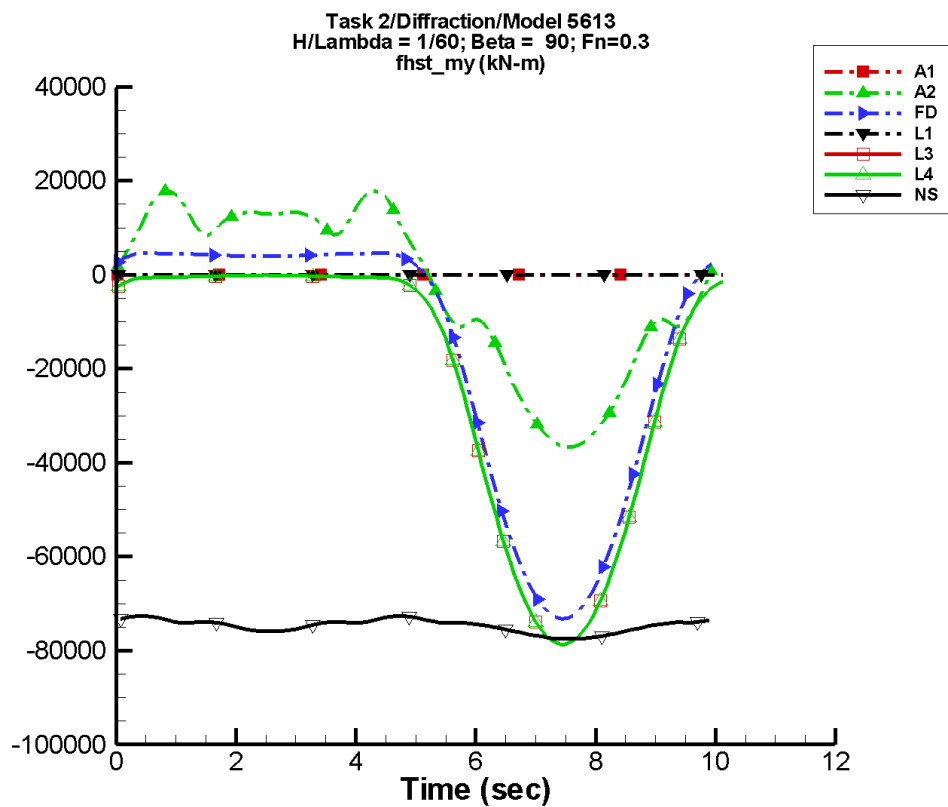
Table G–1277. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-8.87	1.97E+04	-42	14.3	-50
A2	1.34E+04	1.92E+04	-30	4.21E+03	24
FD	1.18E+04	2.02E+04	-46	4.25E+03	-18
L1	31.6	1.97E+04	-49	33.1	-28
L3	6.22E+03	1.93E+04	-23	3.69E+03	27
L4	6.22E+03	1.93E+04	-23	3.69E+03	27
NF	—	—	—	—	—
NS	3.38E+03	2.35E+04	-4	4.83E+03	81

Table G–1278. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

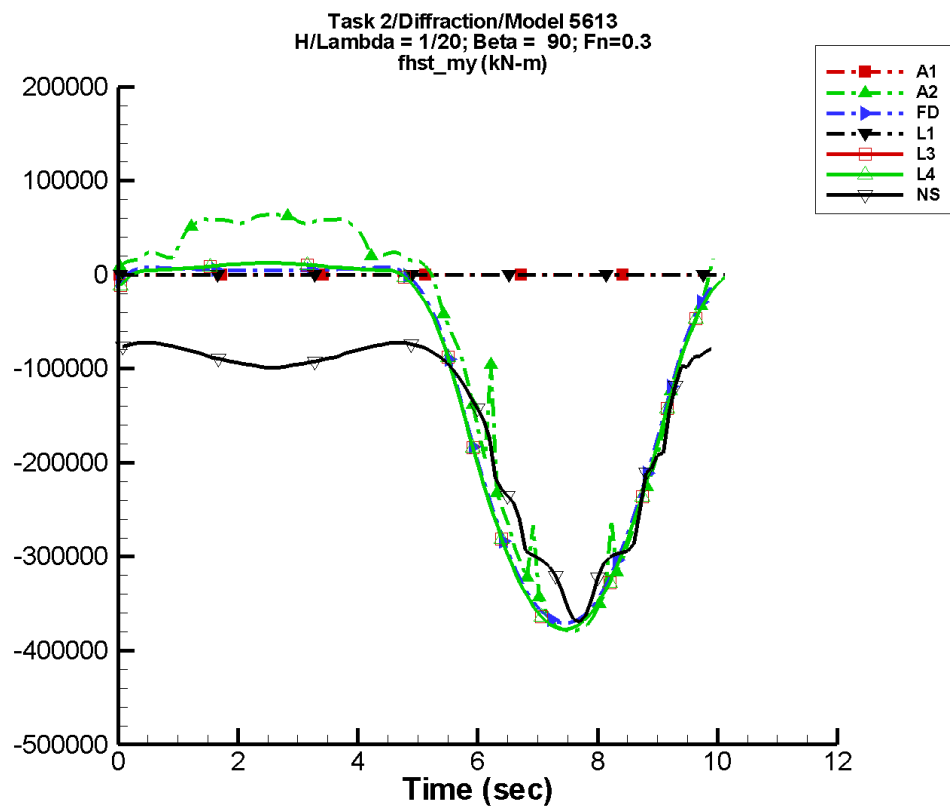| Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.97E+04	1.97E+04	-1.91E+04	1.91E+04
A2	-1.12E+04	2.94E+04	-9.77E+03	2.90E+04
FD	-1.31E+04	2.83E+04	-1.19E+04	2.81E+04
L1	-1.97E+04	1.97E+04	-1.95E+04	1.95E+04
L3	-1.68E+04	2.20E+04	-1.65E+04	2.19E+04
L4	-1.68E+04	2.20E+04	-1.65E+04	2.19E+04
NF	—	—	—	—
NS	-2.49E+04	2.27E+04	-2.47E+04	2.21E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–640. Time history of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
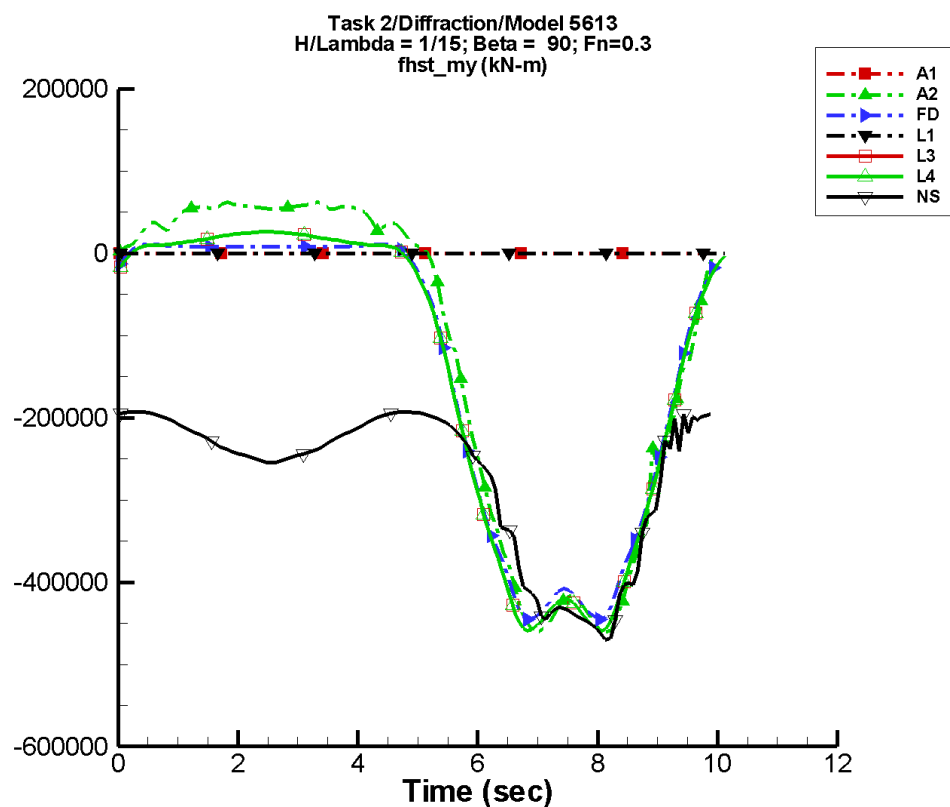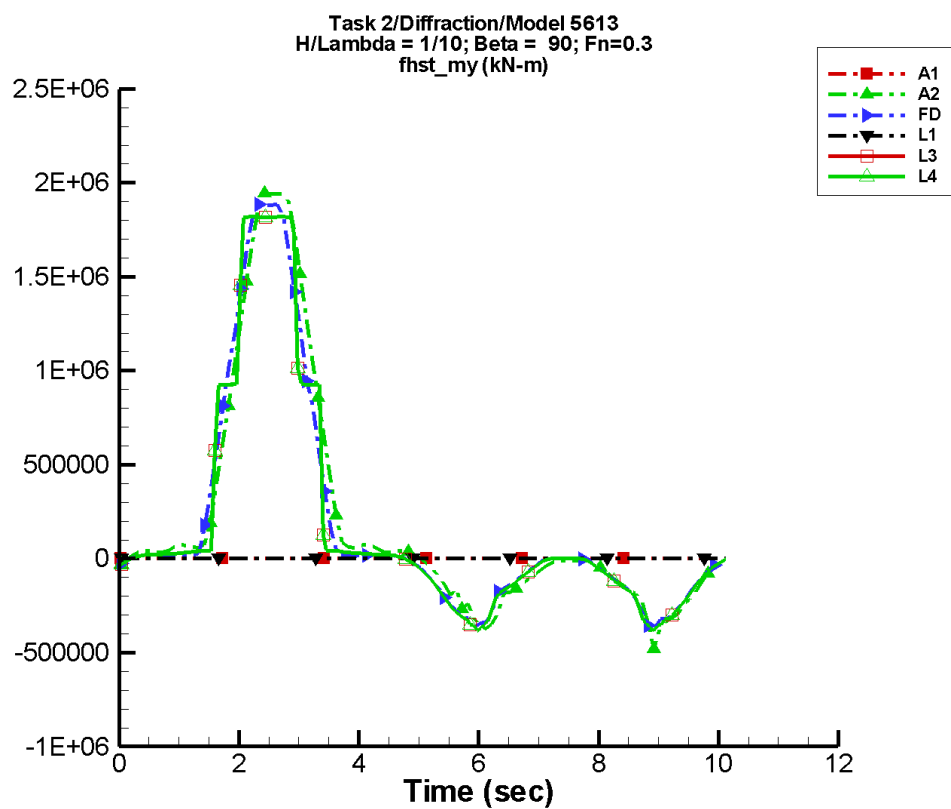
Table G–1279. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-13.3	2.95E+04	-42	21.4	-50
A2	2.62E+04	2.02E+04	-17	4.95E+03	119
FD	2.74E+04	2.09E+04	-39	3.29E+03	78
L1	47.3	2.96E+04	-49	49.7	-28
L3	1.74E+04	1.79E+04	-12	4.19E+03	133
L4	1.74E+04	1.79E+04	-12	4.19E+03	133
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1280. Minimum and maximum of of F_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.95E+04	2.96E+04	-2.86E+04	2.86E+04
A2	3.06E+03	4.76E+04	4.69E+03	4.53E+04
FD	4.02E+03	4.63E+04	6.63E+03	4.57E+04
L1	-2.96E+04	2.96E+04	-2.93E+04	2.93E+04
L3	-6.42E+03	3.39E+04	-3.26E+03	3.37E+04
L4	-6.42E+03	3.39E+04	-3.26E+03	3.37E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–641. Time history of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1281. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	3.36E-05	3.66E-02	-159	4.52E-05	172
A2	-8.55E-05	6.43E-03	-73	3.01E-05	33
FD	-8.35E-05	5.25E-05	138	8.94E-05	128
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.56E-04	4.55E-04	73	2.33E-04	108

Table G–1282. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

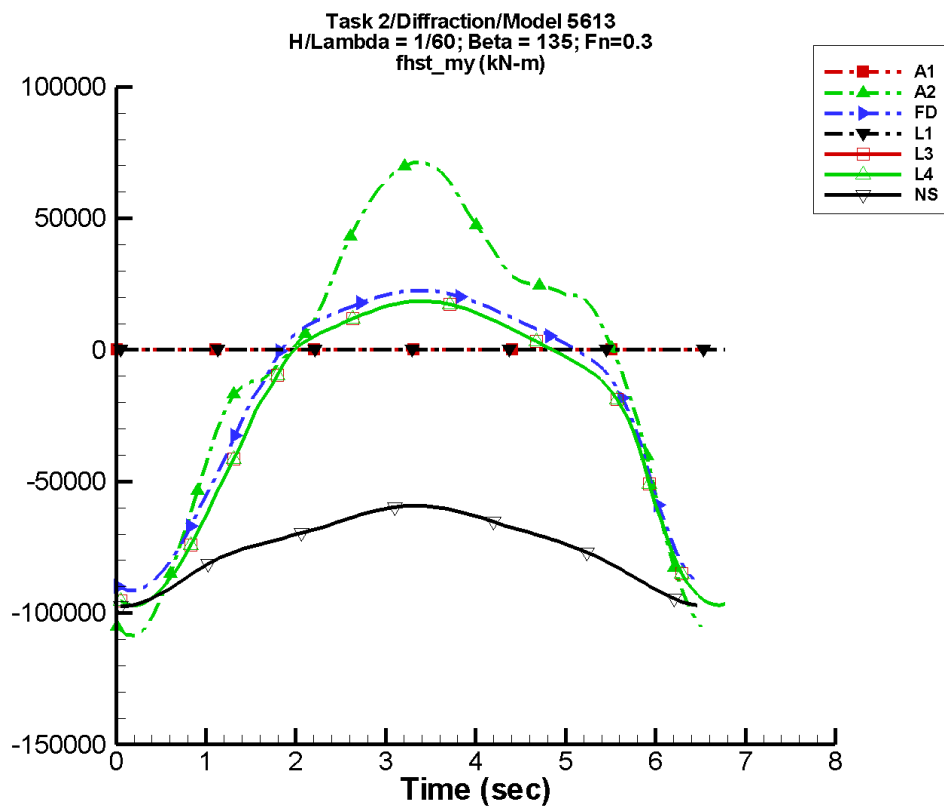| Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.66E-02	3.66E-02	-3.63E-02	3.62E-02
A2	-6.53E-03	6.45E-03	-6.46E-03	6.31E-03
FD	-8.90E-04	6.14E-04	-2.95E-04	1.29E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-4.45E-03	3.24E-03	-1.39E-03	1.02E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.0
ffk_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–642. Time history of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1283. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
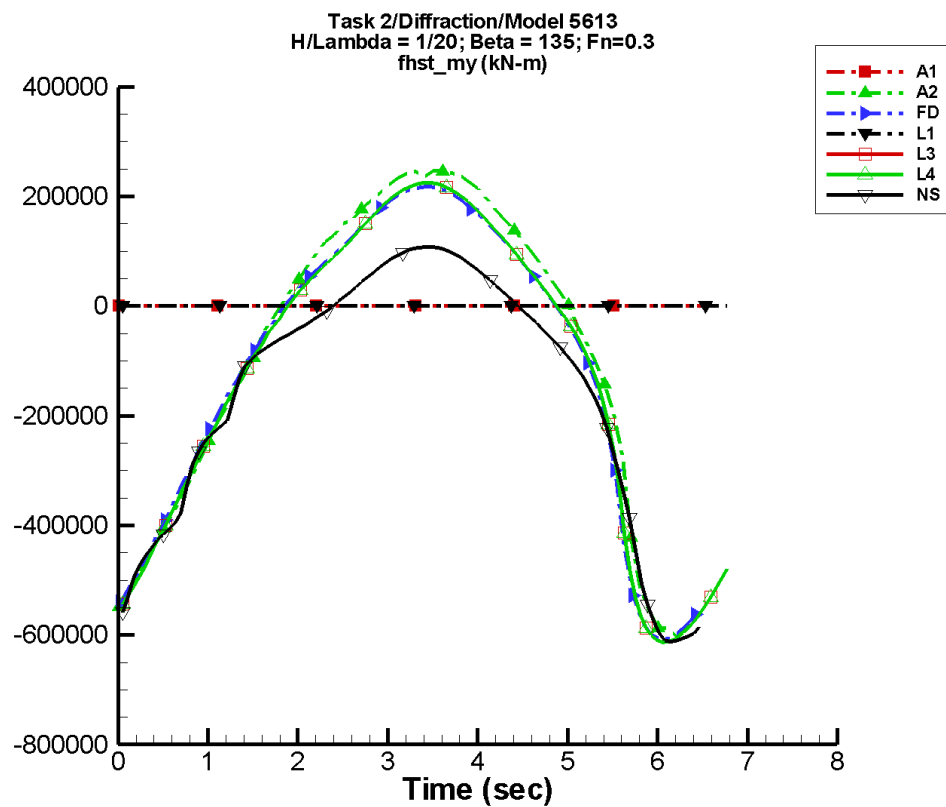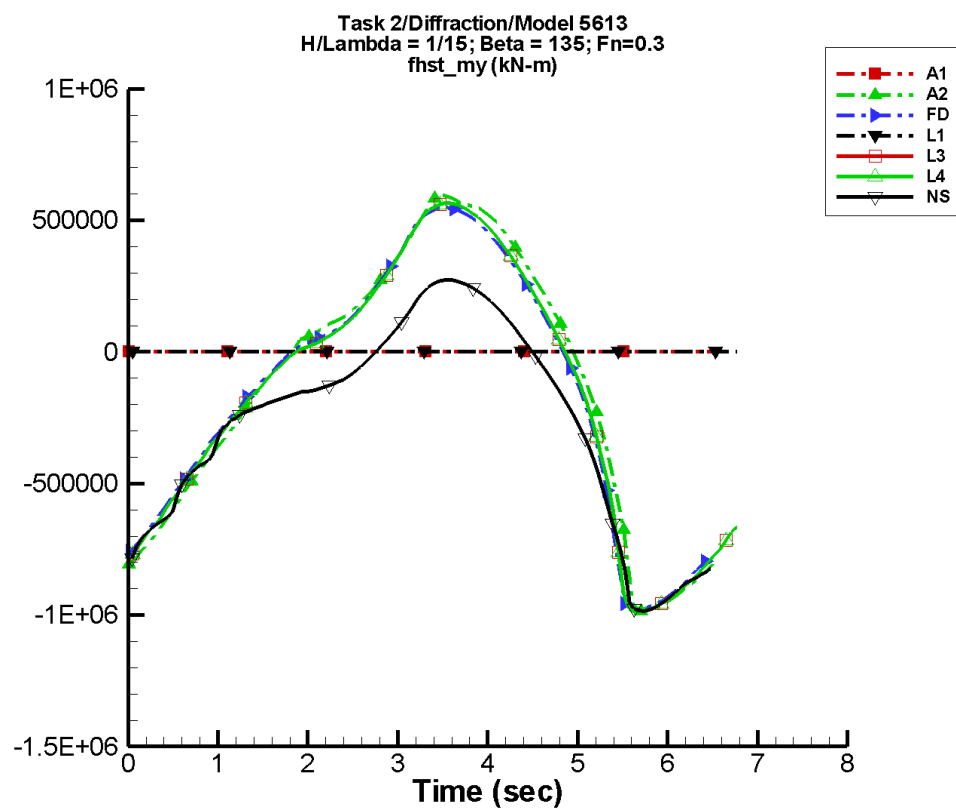
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.01E-04	0.110	-159	1.36E-04	172
A2	48.5	140.	-63	223.	179
FD	3.60E-05	8.08E-05	-179	4.17E-05	29
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-8.16E-04	1.36E-03	-13	1.40E-03	-142

Table G–1284. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.110	0.110	-0.109	0.109
A2	-6.26E+03	7.77E+03	-835.	1.04E+03
FD	-8.68E-04	9.99E-04	-2.36E-04	2.96E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.21E-02	1.55E-02	-5.40E-03	4.08E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–643. Time history of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
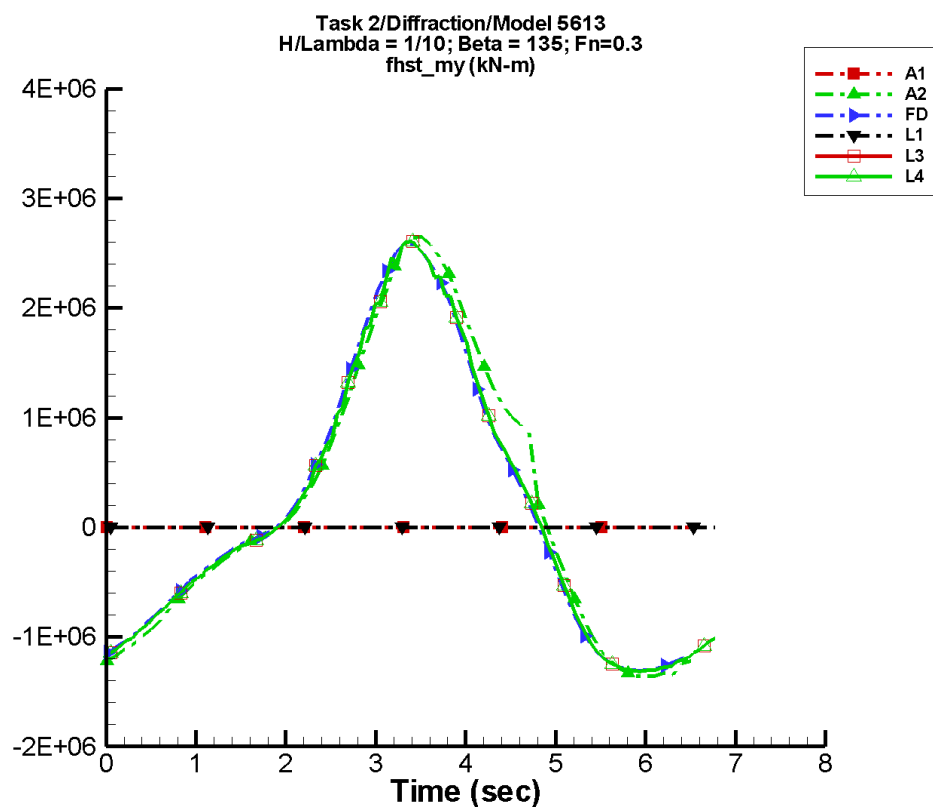
Table G–1285. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.35E-04	0.147	-159	1.82E-04	172
A2	-24.6	52.6	-110	61.1	-135
FD	4.51E-05	1.49E-04	-61	1.73E-04	5
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.69E-04	1.26E-03	86	1.44E-03	74

Table G–1286. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.147	0.147	-0.146	0.146
A2	-4.67E+03	2.59E-02	-623.	53.2
FD	-8.15E-04	8.16E-04	-3.56E-04	3.71E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-2.58E-02	2.54E-02	-5.58E-03	5.24E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–644. Time history of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
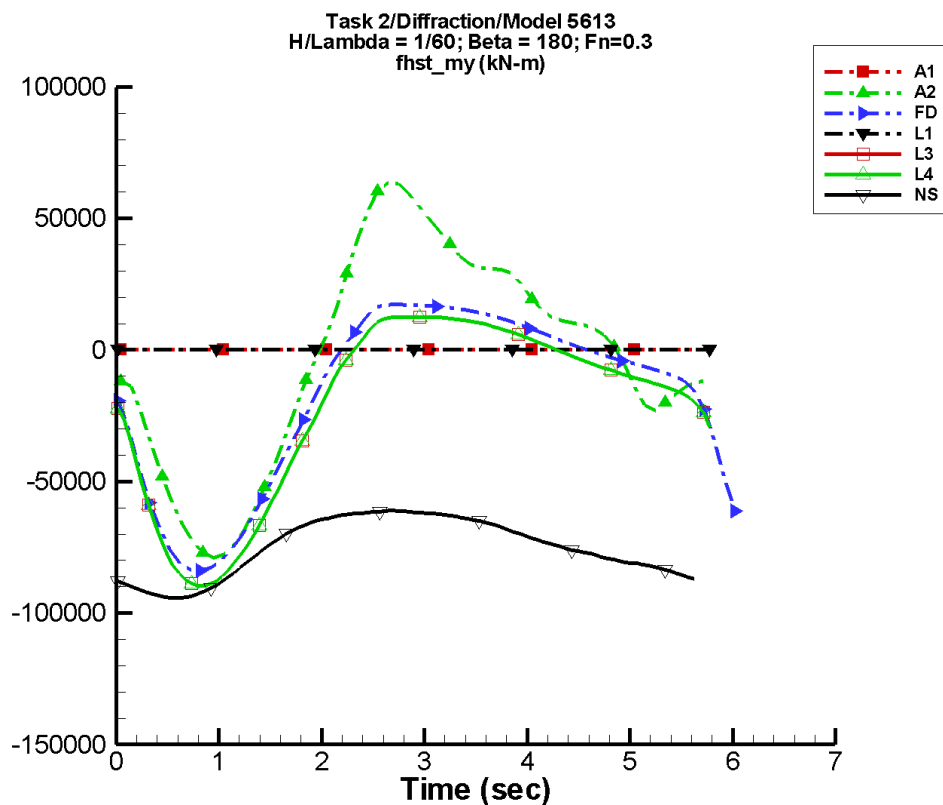
Table G–1287. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.03E-04	0.221	-159	2.73E-04	172
A2	8.93	22.8	136	37.2	159
FD	-5.06E-05	2.01E-04	-83	1.70E-04	5
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1288. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.221	0.221	-0.219	0.218
A2	-1.11E+03	1.63E+03	-141.	221.
FD	-1.61E-03	1.21E-03	-6.31E-04	3.65E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–645. Time history of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1289. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
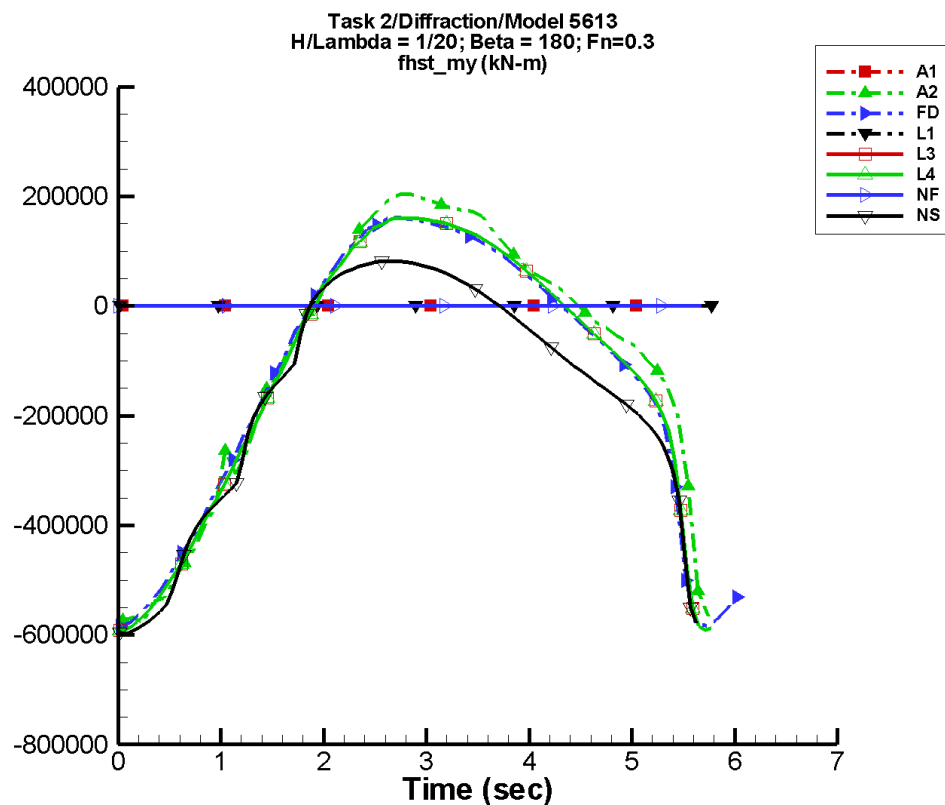
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.42	8.18E+03	-59	5.73	-119
A2	-4.00	7.44E+03	-65	1.04E+03	12
FD	-26.0	7.39E+03	-66	891.	14
L1	5.05	8.18E+03	-59	7.56	5
L3	-0.329	7.29E+03	-63	886.	21
L4	-0.329	7.29E+03	-63	886.	21
NF	—	—	—	—	—
NS	22.9	7.27E+03	-65	330.	9

Table G–1290. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-8.18E+03	8.18E+03	-8.10E+03	8.10E+03
A2	-8.04E+03	6.88E+03	-7.84E+03	6.81E+03
FD	-7.58E+03	6.79E+03	-7.50E+03	6.74E+03
L1	-8.18E+03	8.18E+03	-8.15E+03	8.15E+03
L3	-7.43E+03	6.72E+03	-7.40E+03	6.70E+03
L4	-7.43E+03	6.72E+03	-7.40E+03	6.70E+03
NF	—	—	—	—
NS	-7.27E+03	6.79E+03	-7.20E+03	6.75E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–646. Time history of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
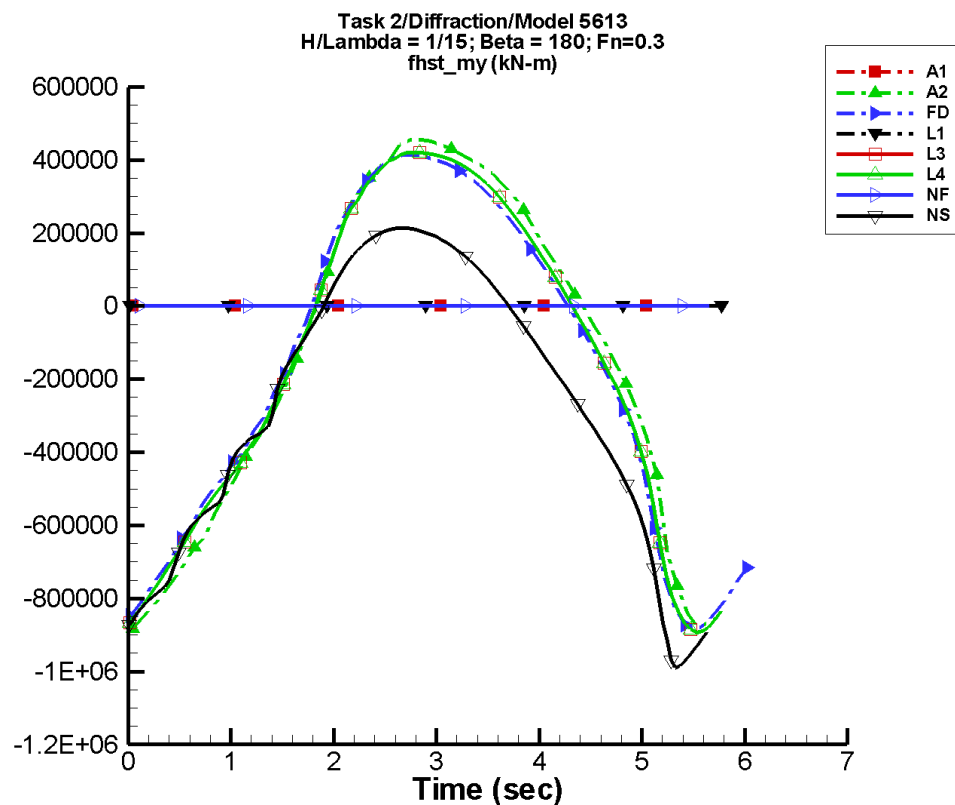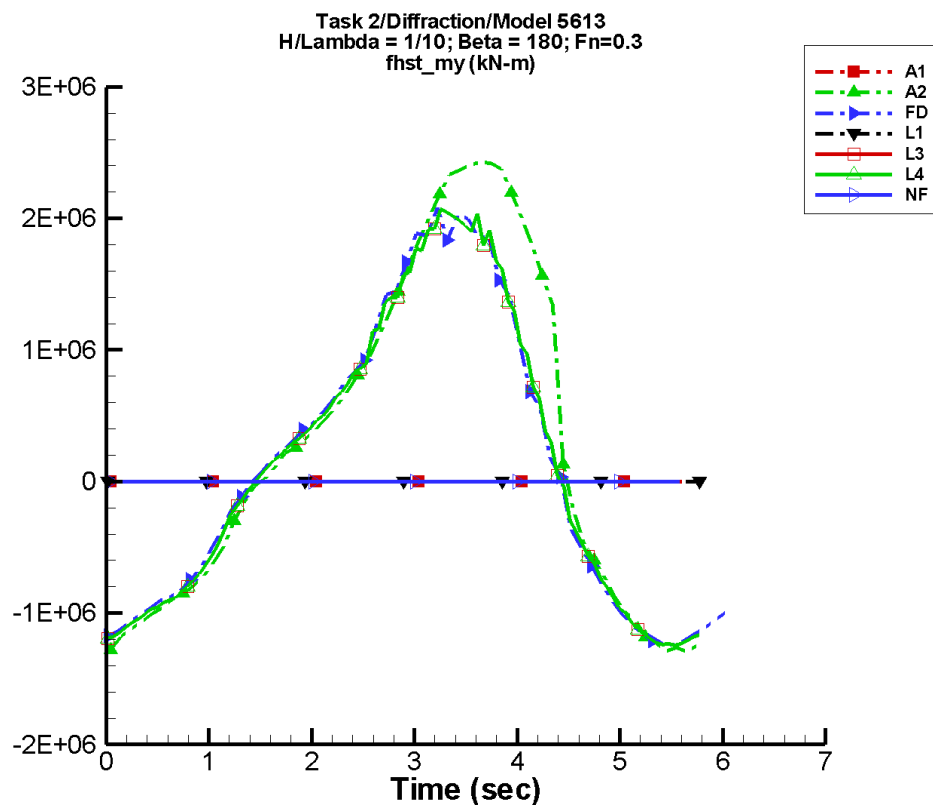
Table G–1291. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	7.29	2.46E+04	-59	17.2	-119
A2	-57.9	2.00E+04	-72	3.86E+03	-26
FD	-78.1	1.96E+04	-72	4.77E+03	-18
L1	15.1	2.45E+04	-59	22.7	5
L3	163.	1.82E+04	-72	4.63E+03	-15
L4	163.	1.82E+04	-72	4.63E+03	-15
NF	—	—	—	—	—
NS	-33.0	1.85E+04	-71	3.19E+03	-25

Table G–1292. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.46E+04	2.46E+04	-2.44E+04	2.44E+04
A2	-2.49E+04	1.75E+04	-2.31E+04	1.61E+04
FD	-2.21E+04	1.75E+04	-2.18E+04	1.55E+04
L1	-2.45E+04	2.45E+04	-2.45E+04	2.45E+04
L3	-2.02E+04	1.85E+04	-2.01E+04	1.67E+04
L4	-2.02E+04	1.85E+04	-2.01E+04	1.67E+04
NF	—	—	—	—
NS	-1.98E+04	1.67E+04	-1.96E+04	1.51E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–647. Time history of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
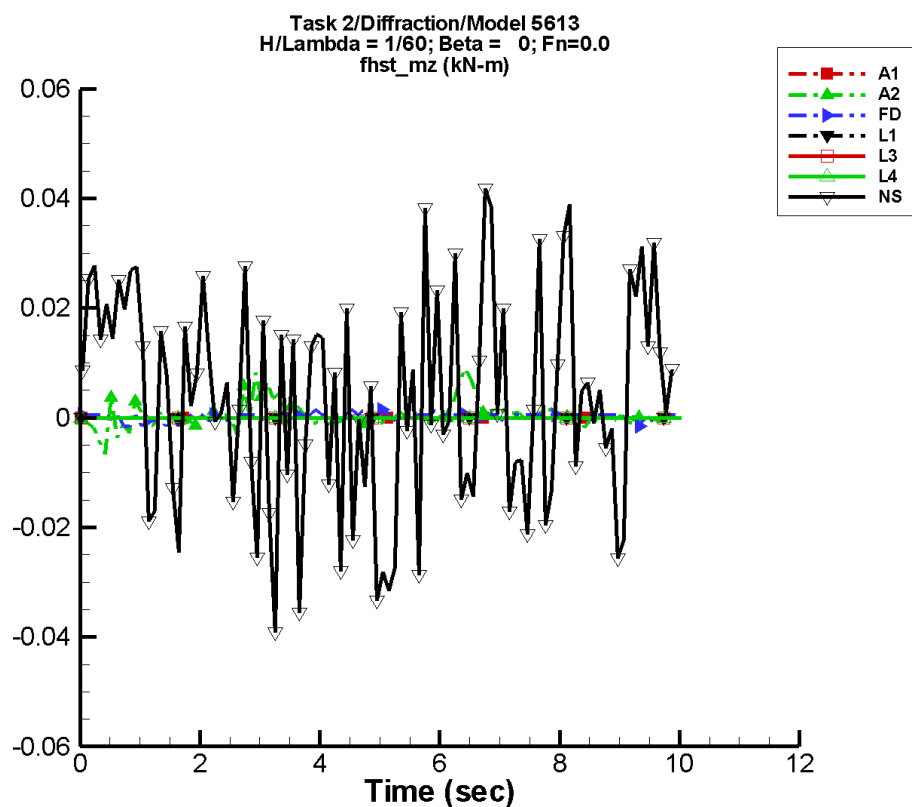
Table G–1293. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	9.73	3.29E+04	-59	23.0	-119
A2	9.71	2.36E+04	-72	1.92E+03	-22
FD	67.1	2.33E+04	-72	3.56E+03	-43
L1	20.2	3.27E+04	-59	30.2	5
L3	55.7	2.05E+04	-71	2.82E+03	-44
L4	55.7	2.05E+04	-71	2.82E+03	-44
NF	—	—	—	—	—
NS	-235.	2.18E+04	-76	3.47E+03	-99

Table G–1294. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.28E+04	3.29E+04	-3.25E+04	3.25E+04
A2	-2.82E+04	3.10E+04	-2.76E+04	2.19E+04
FD	-2.61E+04	2.12E+04	-2.57E+04	2.08E+04
L1	-3.27E+04	3.27E+04	-3.26E+04	3.26E+04
L3	-2.22E+04	1.86E+04	-2.20E+04	1.84E+04
L4	-2.22E+04	1.86E+04	-2.20E+04	1.84E+04
NF	—	—	—	—
NS	-2.48E+04	2.20E+04	-2.47E+04	1.93E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–648. Time history of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
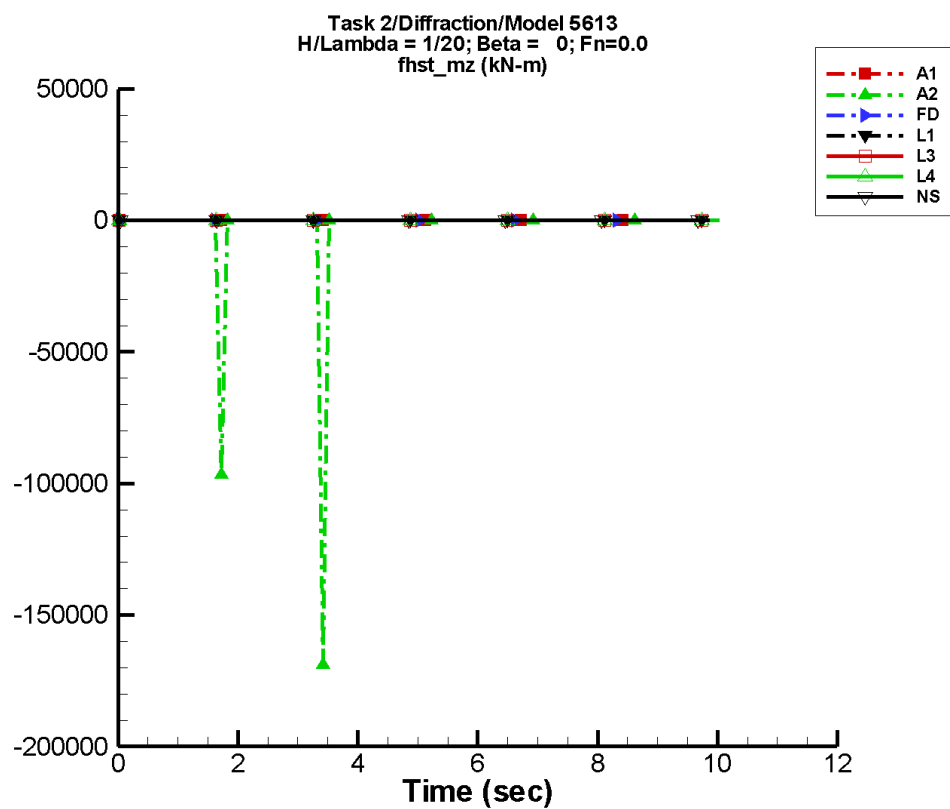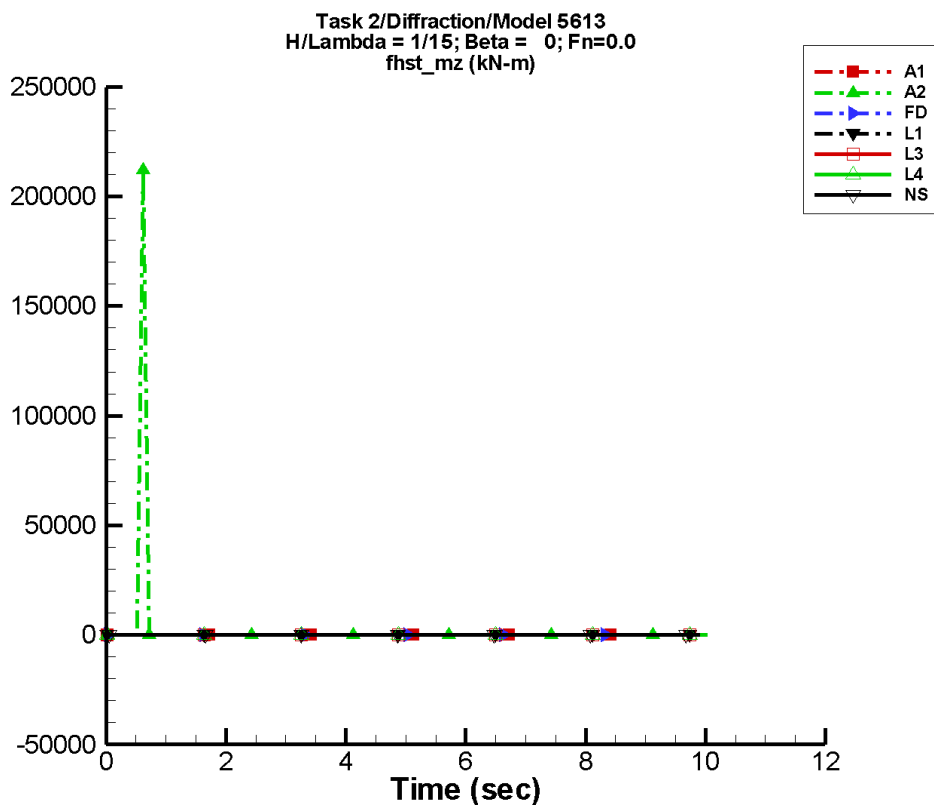
Table G–1295. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	14.6	4.93E+04	-59	34.5	-119
A2	-1.84E+03	4.29E+04	-79	7.80E+03	-144
FD	-467.	3.89E+04	-79	4.76E+03	179
L1	30.3	4.91E+04	-59	45.4	5
L3	-296.	3.25E+04	-77	3.98E+03	-174
L4	-296.	3.25E+04	-77	3.98E+03	-174
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1296. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.93E+04	4.93E+04	-4.88E+04	4.88E+04
A2	-9.03E+04	4.29E+04	-5.57E+04	4.22E+04
FD	-4.60E+04	4.10E+04	-4.39E+04	3.98E+04
L1	-4.91E+04	4.91E+04	-4.89E+04	4.89E+04
L3	-3.78E+04	3.45E+04	-3.69E+04	3.37E+04
L4	-3.78E+04	3.45E+04	-3.69E+04	3.37E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–649. Time history of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
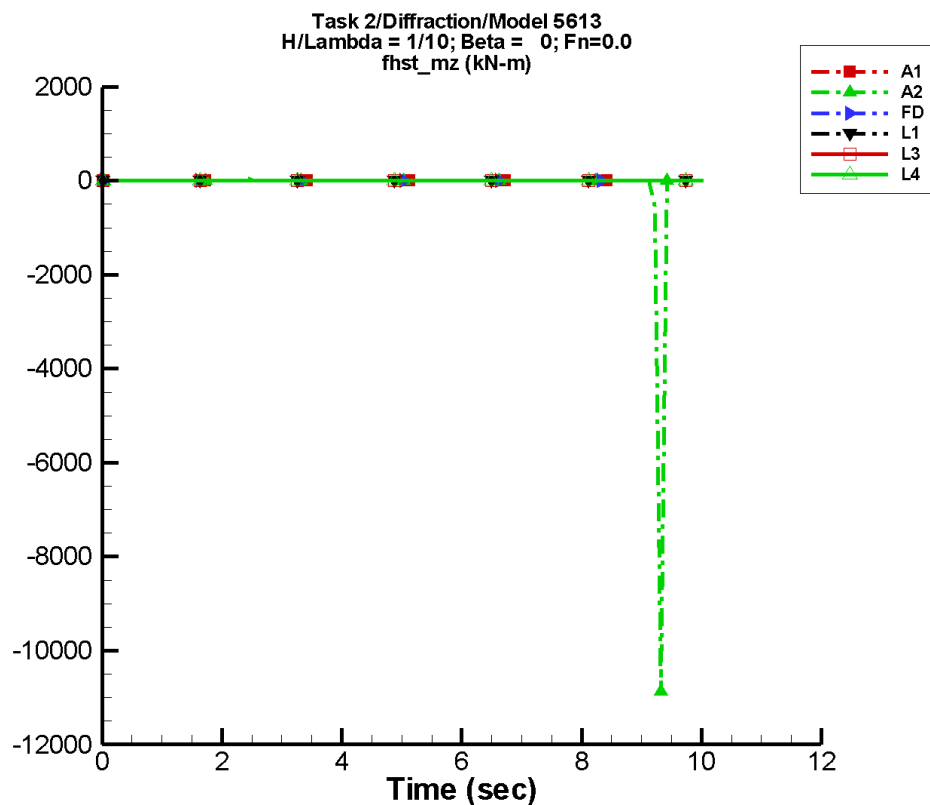
Table G–1297. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	13.5	1.68E+04	-94	18.8	-156
A2	-6.89	1.42E+04	-98	1.03E+03	169
FD	-41.9	1.43E+04	-97	1.55E+03	161
L1	4.26	1.68E+04	-94	6.79	151
L3	-11.7	1.40E+04	-94	811.	179
L4	-11.7	1.40E+04	-94	811.	179
NF	—	—	—	—	—
NS	55.5	1.36E+04	-92	858.	177

Table G–1298. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.68E+04	1.68E+04	-1.68E+04	1.66E+04
A2	-1.68E+04	1.67E+04	-1.64E+04	1.58E+04
FD	-1.59E+04	1.60E+04	-1.59E+04	1.56E+04
L1	-1.68E+04	1.68E+04	-1.68E+04	1.67E+04
L3	-1.56E+04	1.56E+04	-1.57E+04	1.55E+04
L4	-1.56E+04	1.56E+04	-1.57E+04	1.55E+04
NF	—	—	—	—
NS	-1.44E+04	1.46E+04	-1.44E+04	1.44E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–650. Time history of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
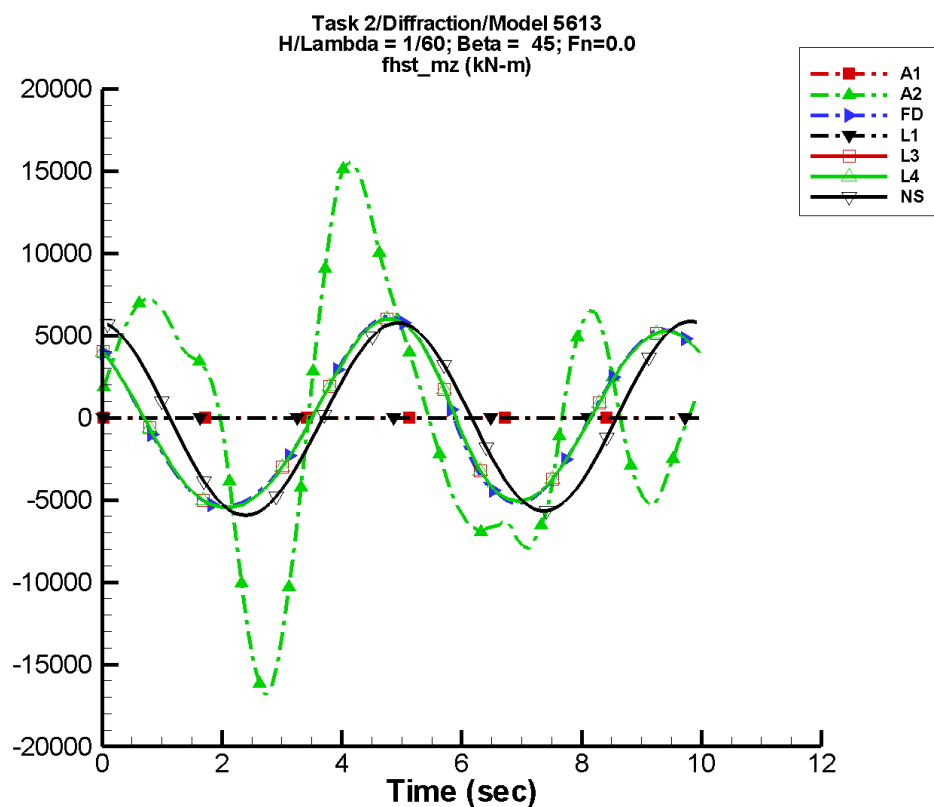
Table G–1299. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	40.5	5.05E+04	-94	56.5	-156
A2	-109.	3.88E+04	-98	2.18E+04	164
FD	-64.6	3.83E+04	-97	1.76E+04	163
L1	12.8	5.03E+04	-94	20.4	151
L3	70.4	3.51E+04	-94	1.30E+04	172
L4	70.4	3.51E+04	-94	1.30E+04	172
NF	—	—	—	—	—
NS	56.8	3.50E+04	-91	1.44E+04	172

Table G–1300. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
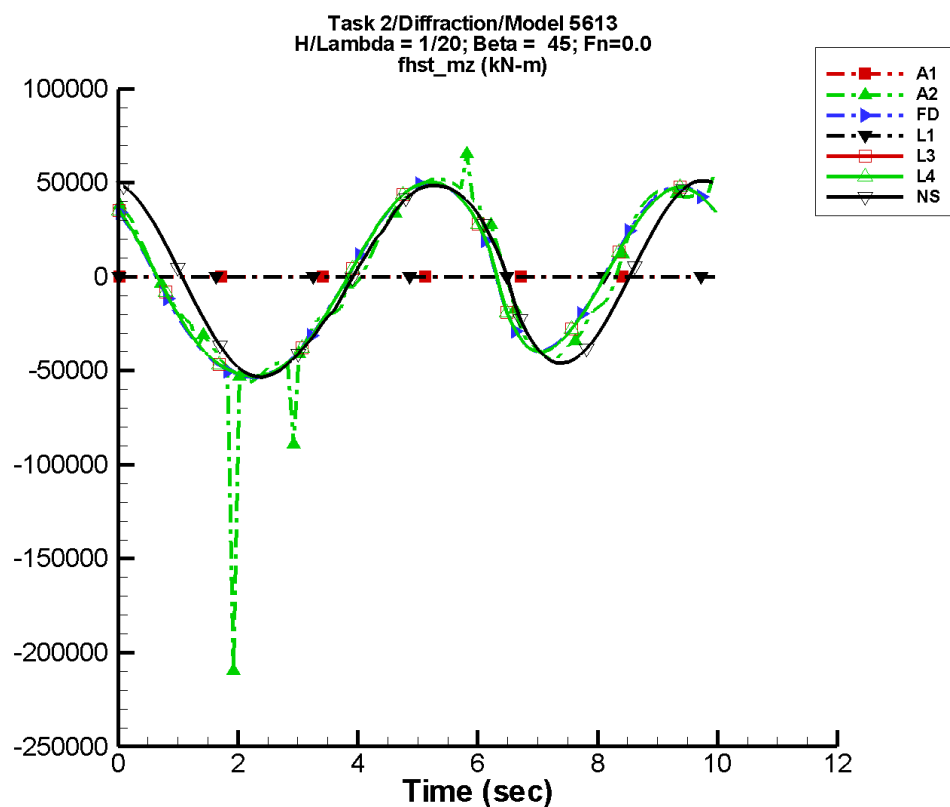
Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-5.05E+04	5.05E+04	-5.05E+04	4.99E+04
A2	-5.05E+04	5.01E+04	-4.70E+04	4.69E+04
FD	-4.64E+04	4.64E+04	-4.56E+04	4.56E+04
L1	-5.03E+04	5.03E+04	-5.04E+04	5.01E+04
L3	-4.28E+04	4.28E+04	-4.26E+04	4.22E+04
L4	-4.28E+04	4.28E+04	-4.26E+04	4.22E+04
NF	—	—	—	—
NS	-4.07E+04	4.27E+04	-4.01E+04	4.19E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–651. Time history of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
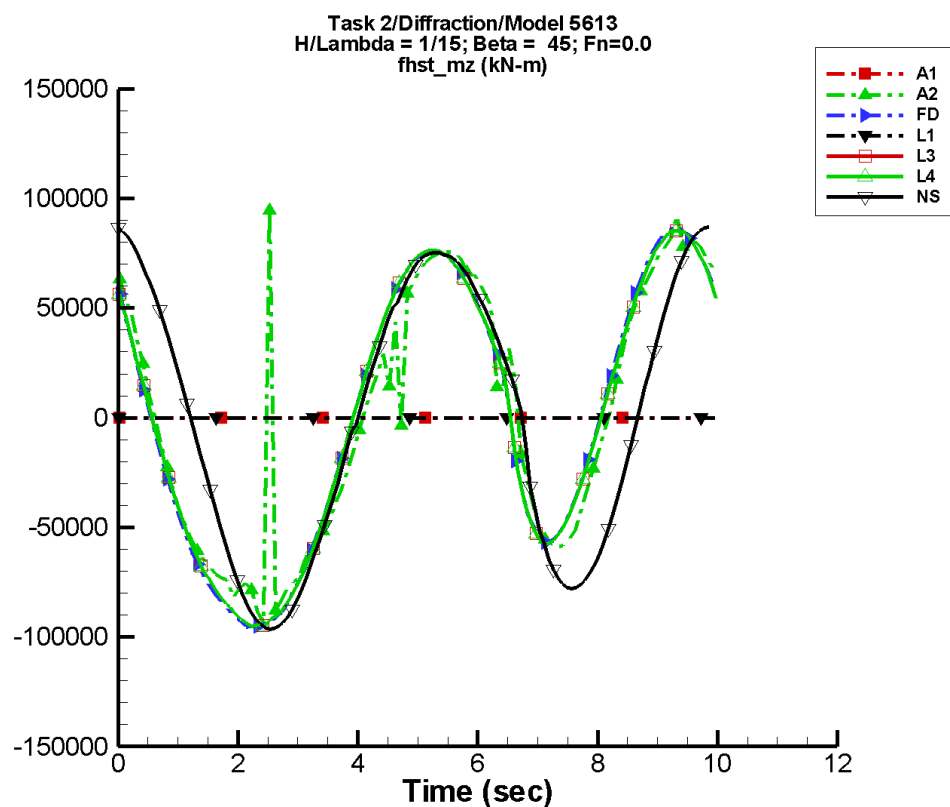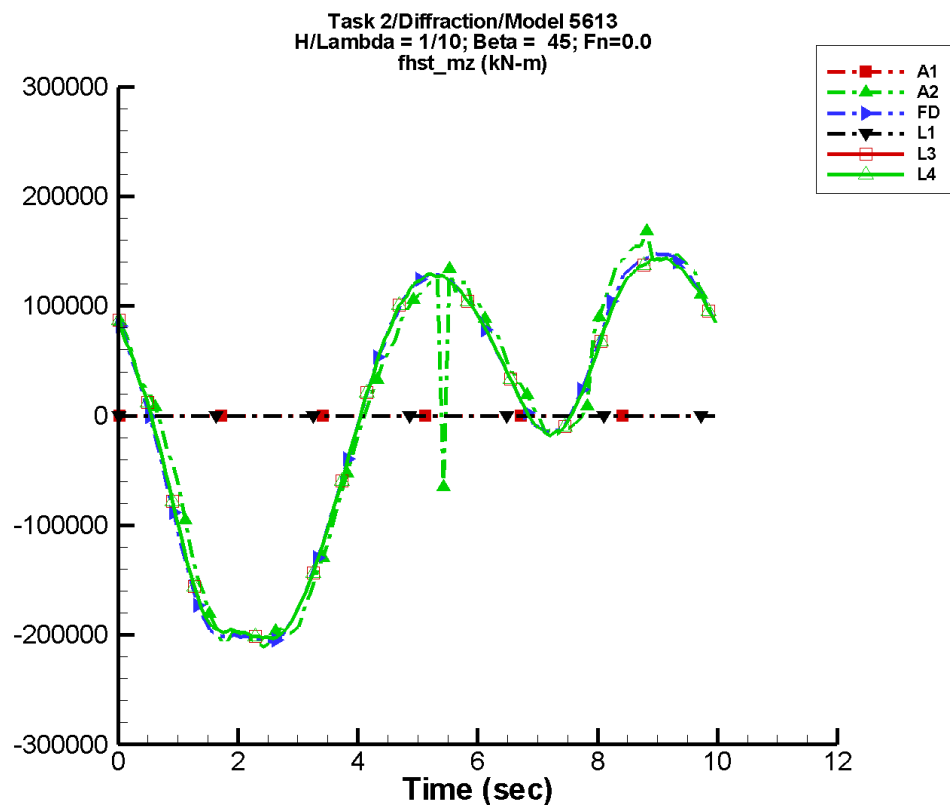
Table G–1301. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	54.1	6.74E+04	-94	75.5	-156
A2	-170.	5.05E+04	-98	4.55E+04	163
FD	-150.	4.89E+04	-97	4.25E+04	162
L1	17.0	6.70E+04	-94	27.2	151
L3	318.	4.23E+04	-93	3.50E+04	171
L4	318.	4.23E+04	-93	3.50E+04	171
NF	—	—	—	—	—
NS	-161.	4.18E+04	-91	3.07E+04	172

Table G–1302. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-6.74E+04	6.74E+04	-6.74E+04	6.67E+04
A2	-7.82E+04	7.81E+04	-7.52E+04	7.52E+04
FD	-7.45E+04	7.45E+04	-7.26E+04	7.25E+04
L1	-6.70E+04	6.70E+04	-6.73E+04	6.68E+04
L3	-5.94E+04	5.94E+04	-5.89E+04	5.89E+04
L4	-5.94E+04	5.94E+04	-5.89E+04	5.89E+04
NF	—	—	—	—
NS	-5.67E+04	5.87E+04	-5.60E+04	5.80E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–652. Time history of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
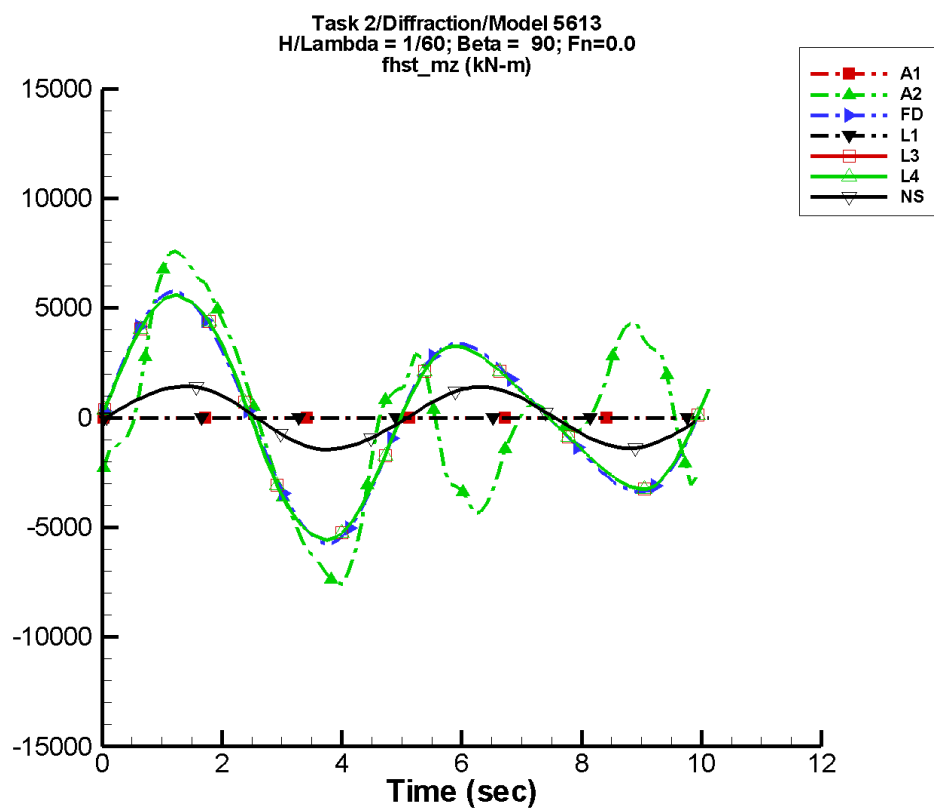
Table G–1303. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	81.2	1.01E+05	-94	113.	-156
A2	291.	9.52E+04	-99	1.05E+05	163
FD	872.	8.57E+04	-99	9.46E+04	166
L1	25.5	1.01E+05	-94	40.7	151
L3	-136.	7.15E+04	-95	7.91E+04	171
L4	-136.	7.15E+04	-95	7.91E+04	171
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1304. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.01E+05	1.01E+05	-1.01E+05	1.00E+05
A2	-2.33E+05	2.32E+05	-2.03E+05	2.02E+05
FD	-1.94E+05	1.92E+05	-1.71E+05	1.71E+05
L1	-1.01E+05	1.01E+05	-1.01E+05	1.00E+05
L3	-1.56E+05	1.56E+05	-1.52E+05	1.52E+05
L4	-1.56E+05	1.56E+05	-1.52E+05	1.52E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–653. Time history of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1305. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
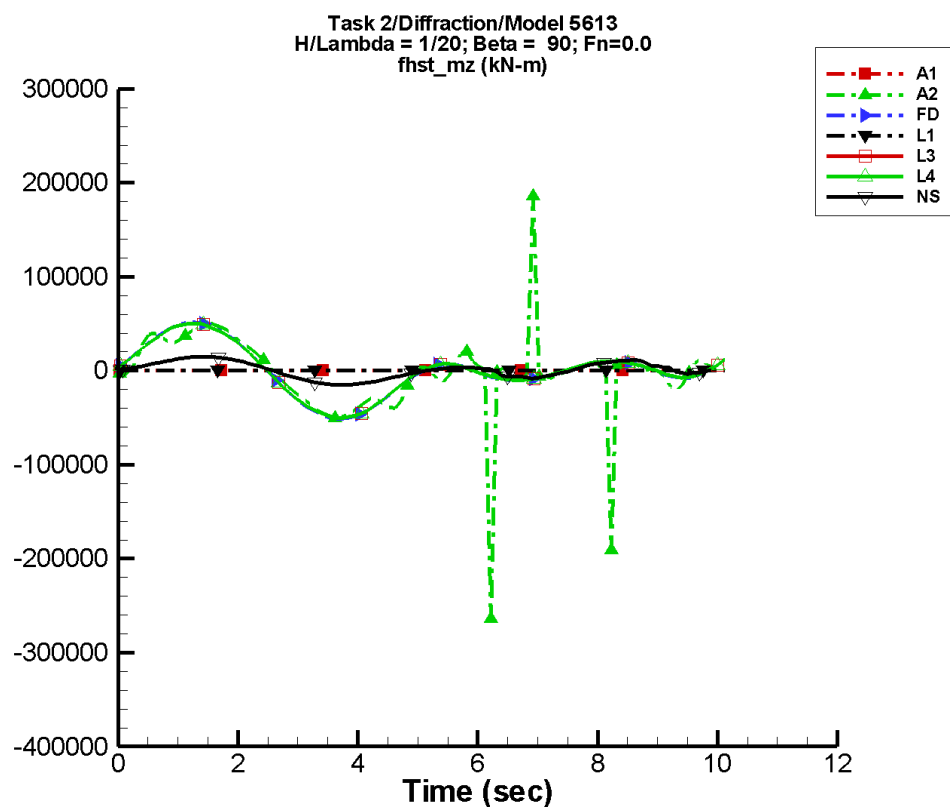
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	8.35	8.18E+03	-129	11.0	-174
A2	31.6	7.38E+03	-131	1.07E+03	-45
FD	23.9	7.30E+03	-129	798.	-47
L1	6.47	8.18E+03	-129	8.64	-146
L3	7.52	7.25E+03	-125	860.	-44
L4	7.52	7.25E+03	-125	860.	-44
NF	—	—	—	—	—
NS	38.5	7.23E+03	-119	372.	-16

Table G–1306. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-8.18E+03	8.18E+03	-8.11E+03	8.10E+03
A2	-6.88E+03	8.03E+03	-6.80E+03	7.83E+03
FD	-6.79E+03	7.58E+03	-6.74E+03	7.49E+03
L1	-8.18E+03	8.18E+03	-8.15E+03	8.15E+03
L3	-6.72E+03	7.43E+03	-6.70E+03	7.40E+03
L4	-6.72E+03	7.43E+03	-6.70E+03	7.40E+03
NF	—	—	—	—
NS	-6.76E+03	7.31E+03	-6.71E+03	7.24E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–654. Time history of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
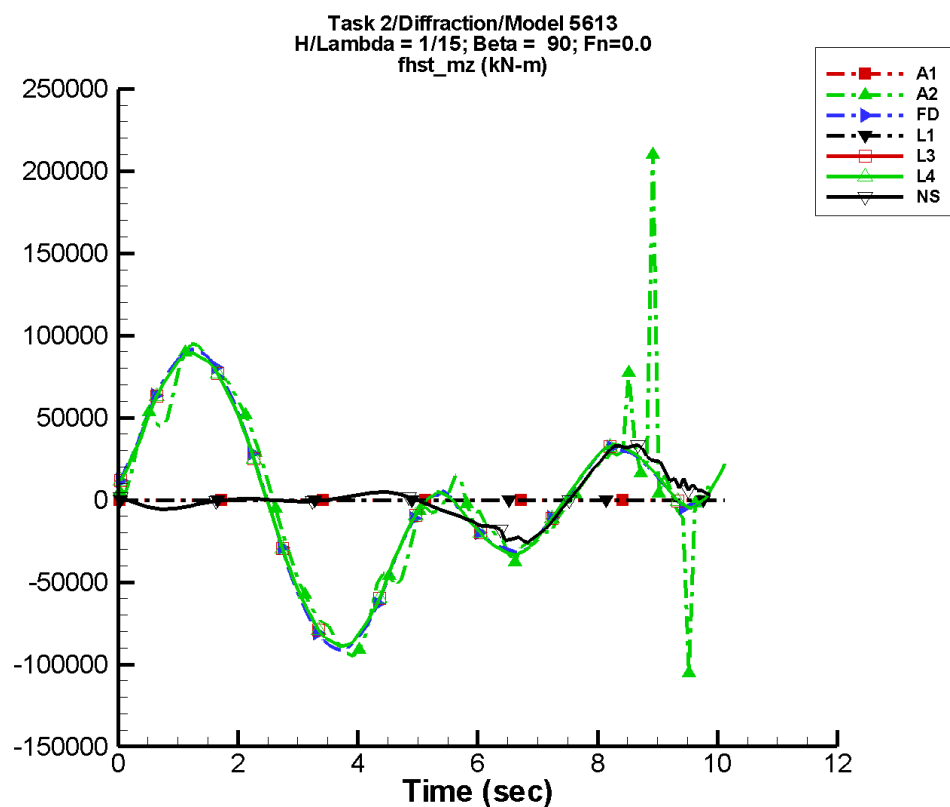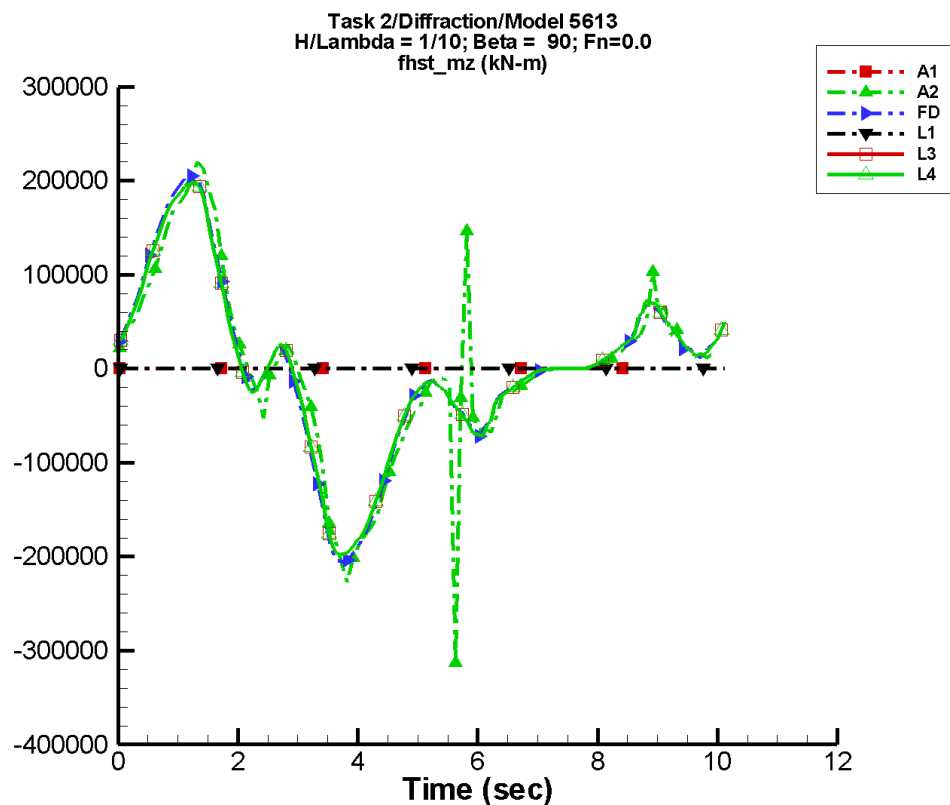
Table G–1307. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	25.1	2.46E+04	-129	33.0	-174
A2	-64.5	1.98E+04	-125	3.98E+03	-3
FD	188.	1.94E+04	-125	4.22E+03	-19
L1	19.4	2.45E+04	-129	25.9	-146
L3	-42.0	1.83E+04	-118	4.49E+03	-12
L4	-42.0	1.83E+04	-118	4.49E+03	-12
NF	—	—	—	—	—
NS	24.3	1.90E+04	-113	3.60E+03	14

Table G–1308. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.46E+04	2.46E+04	-2.44E+04	2.44E+04
A2	-1.98E+04	2.48E+04	-1.61E+04	2.31E+04
FD	-1.76E+04	2.21E+04	-1.56E+04	2.18E+04
L1	-2.45E+04	2.45E+04	-2.45E+04	2.45E+04
L3	-1.85E+04	2.02E+04	-1.66E+04	2.01E+04
L4	-1.85E+04	2.02E+04	-1.66E+04	2.01E+04
NF	—	—	—	—
NS	-1.80E+04	2.05E+04	-1.57E+04	2.03E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.0
ffk_mx (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–655. Time history of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
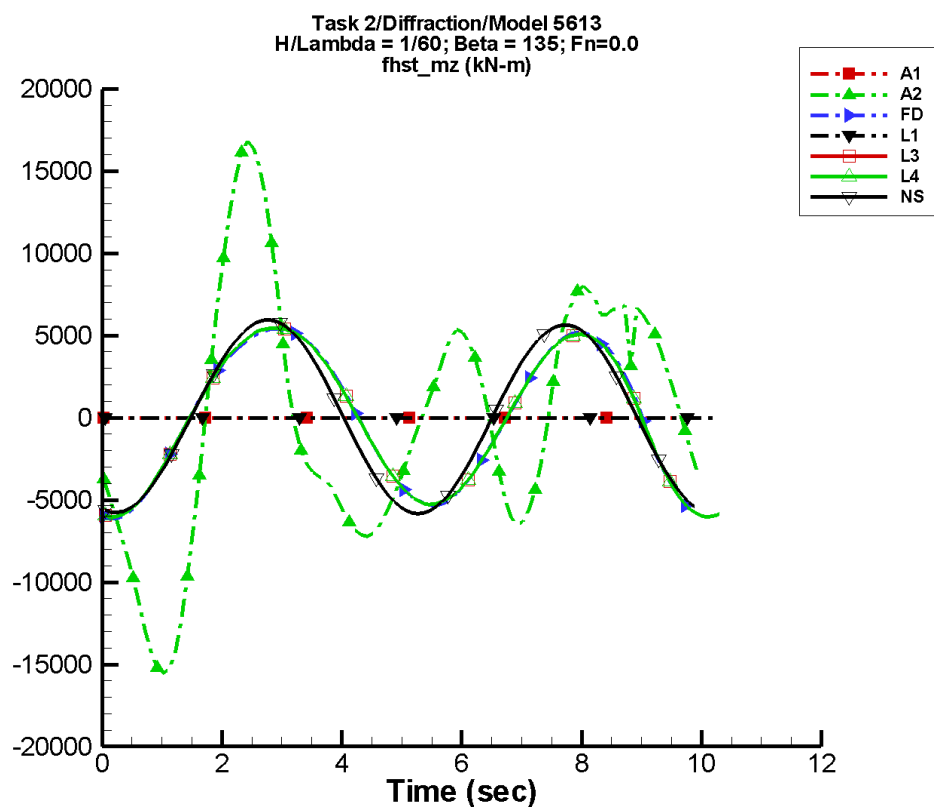
Table G–1309. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	33.5	3.29E+04	-129	44.1	-174
A2	162.	2.42E+04	-125	2.56E+03	19
FD	85.4	2.35E+04	-124	3.33E+03	3
L1	25.9	3.27E+04	-129	34.5	-145
L3	20.2	2.06E+04	-118	2.80E+03	22
L4	20.2	2.06E+04	-118	2.80E+03	22
NF	—	—	—	—	—
NS	-239.	2.28E+04	-105	3.69E+03	80

Table G–1310. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
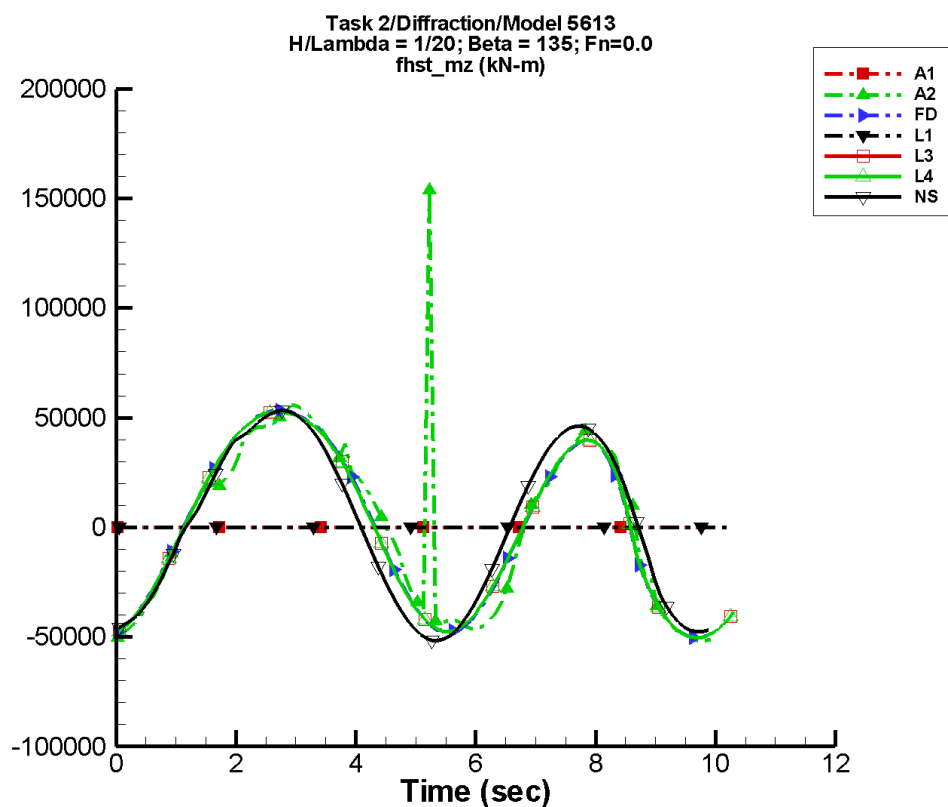
Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.29E+04	3.29E+04	-3.26E+04	3.25E+04
A2	-2.22E+04	3.60E+04	-2.15E+04	2.79E+04
FD	-2.12E+04	2.61E+04	-2.08E+04	2.58E+04
L1	-3.27E+04	3.27E+04	-3.26E+04	3.26E+04
L3	-1.86E+04	2.22E+04	-1.84E+04	2.20E+04
L4	-1.86E+04	2.22E+04	-1.84E+04	2.20E+04
NF	—	—	—	—
NS	-2.20E+04	2.56E+04	-2.05E+04	2.53E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–656. Time history of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
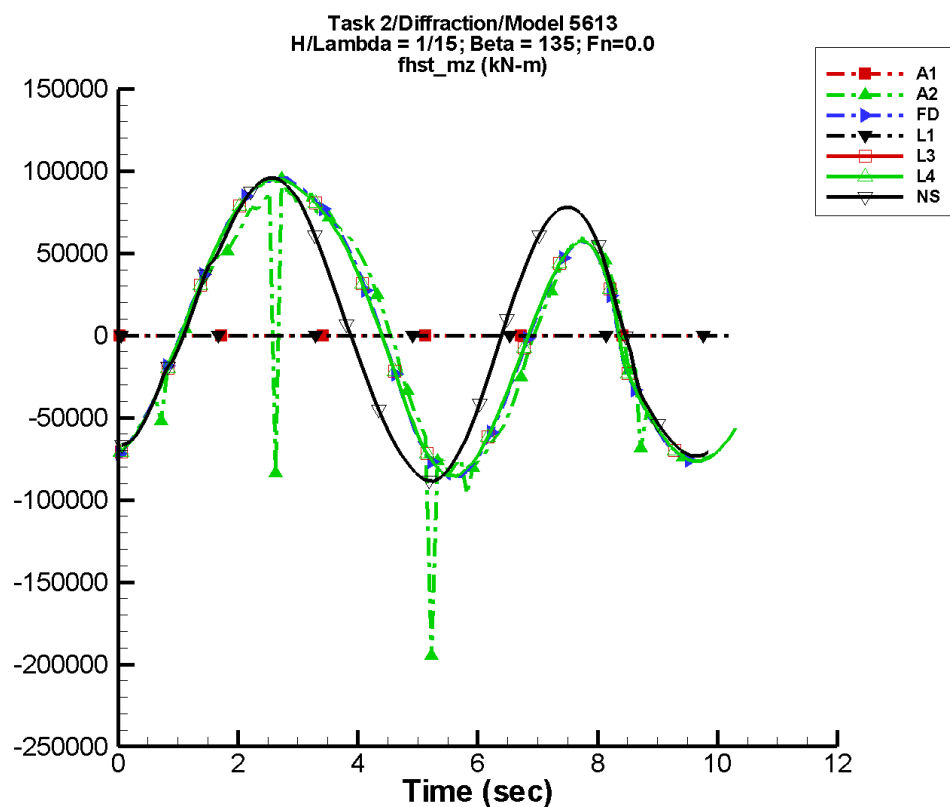
Table G–1311. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	50.3	4.93E+04	-129	66.1	-174
A2	637.	4.13E+04	-116	3.64E+03	150
FD	166.	3.75E+04	-117	5.25E+03	163
L1	38.8	4.91E+04	-129	51.8	-145
L3	131.	3.16E+04	-112	4.29E+03	168
L4	131.	3.16E+04	-112	4.29E+03	168
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1312. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.93E+04	4.93E+04	-4.88E+04	4.88E+04
A2	-4.35E+04	5.99E+04	-4.26E+04	5.60E+04
FD	-4.11E+04	4.64E+04	-3.98E+04	4.37E+04
L1	-4.91E+04	4.91E+04	-4.89E+04	4.89E+04
L3	-3.44E+04	3.78E+04	-3.37E+04	3.74E+04
L4	-3.44E+04	3.78E+04	-3.37E+04	3.74E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–657. Time history of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
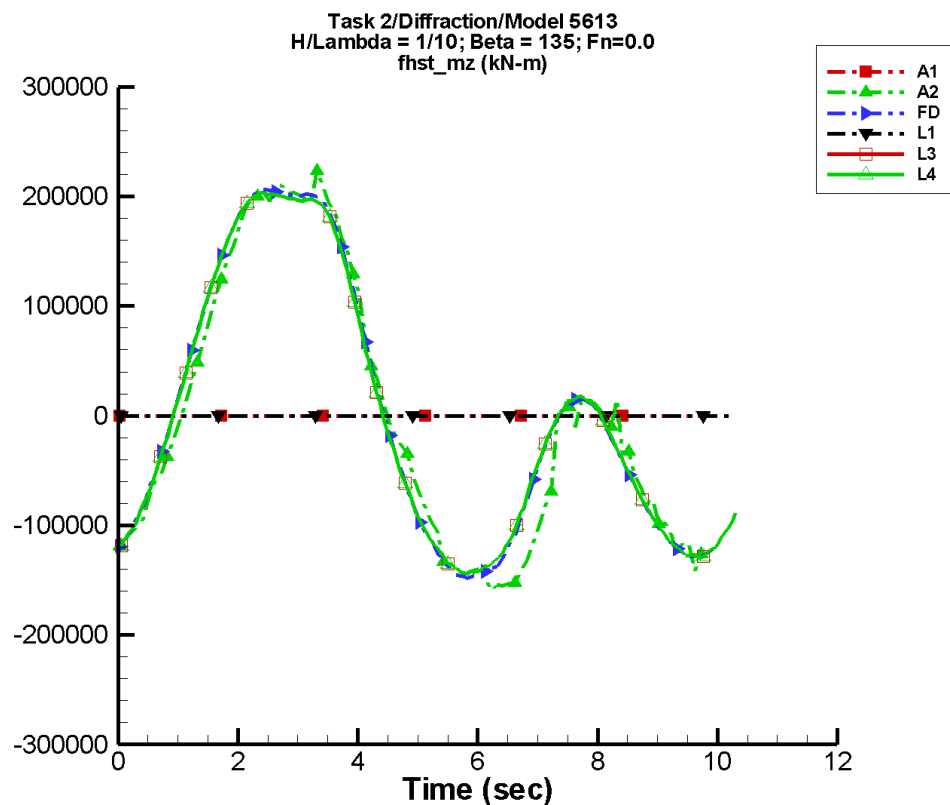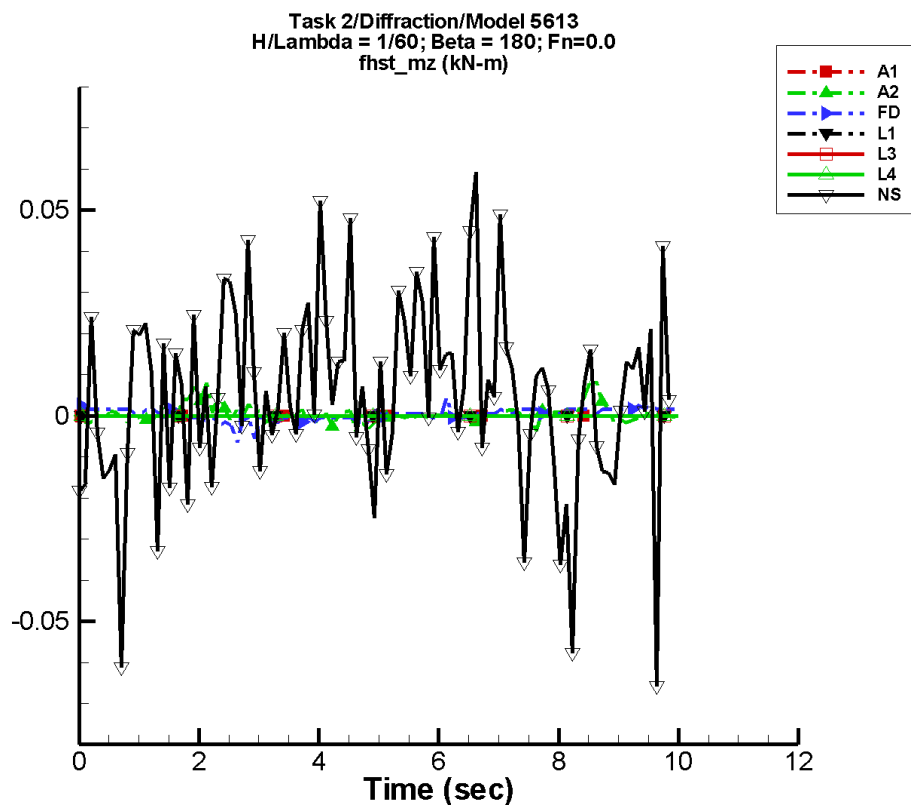
Table G–1313. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	8.07E-06	3.66E-02	150	2.42E-05	121
A2	-1.07E-04	6.40E-03	61	5.70E-05	94
FD	-9.67E-05	2.79E-04	89	6.00E-05	1
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-4.09E-05	2.86E-04	-89	2.57E-04	18

Table G–1314. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.66E-02	3.66E-02	-3.62E-02	3.62E-02
A2	-6.53E-03	6.53E-03	-6.46E-03	6.28E-03
FD	-4.90E-03	3.72E-03	-8.05E-04	7.17E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-3.42E-03	4.22E-03	-1.34E-03	9.45E-04

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–658. Time history of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1315. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.43E-05	0.110	150	7.27E-05	121
A2	-322.	366.	-101	490.	-62
FD	1.08E-02	9.46E-03	150	1.44E-02	-106
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.05E-03	1.15E-03	-39	5.50E-04	-48

Table G–1316. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
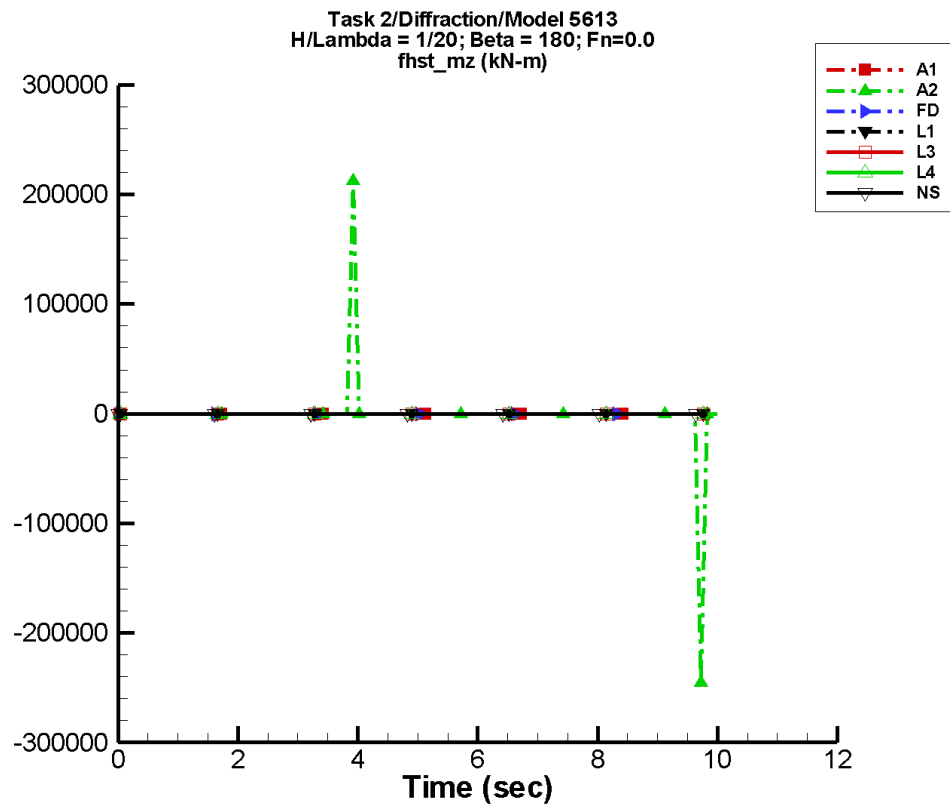
Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.110	0.110	-0.109	0.109
A2	-2.97E+04	1.95E-02	-3.95E+03	377.
FD	-1.76E-02	5.16E-02	-2.58E-03	4.80E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.26E-02	1.18E-02	-4.20E-03	1.86E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–659. Time history of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
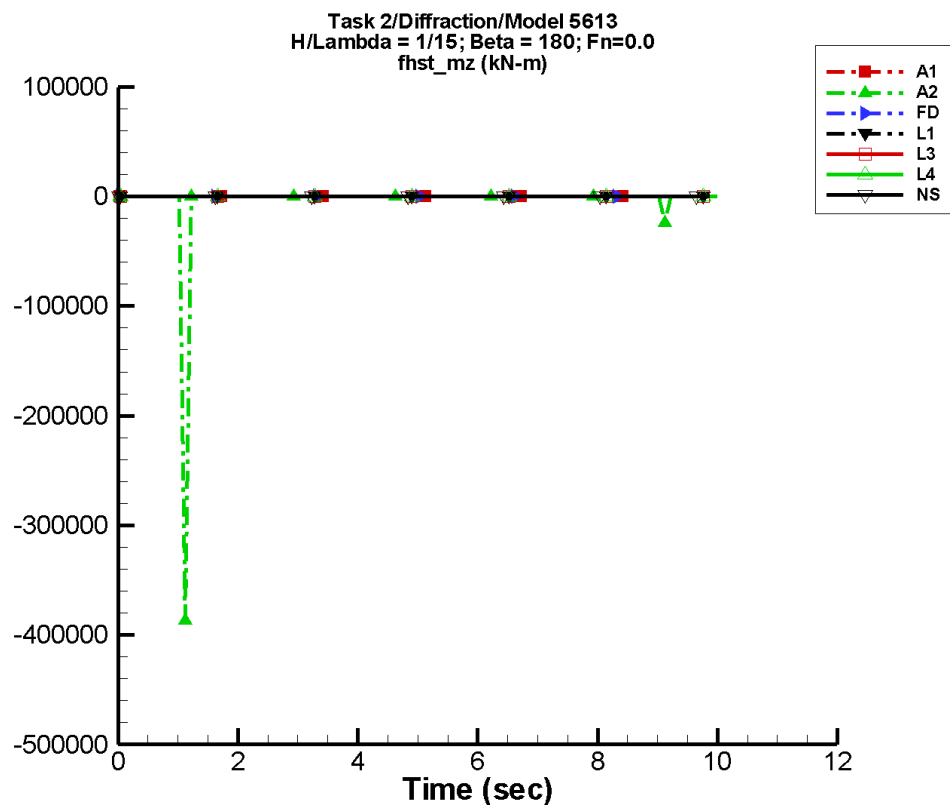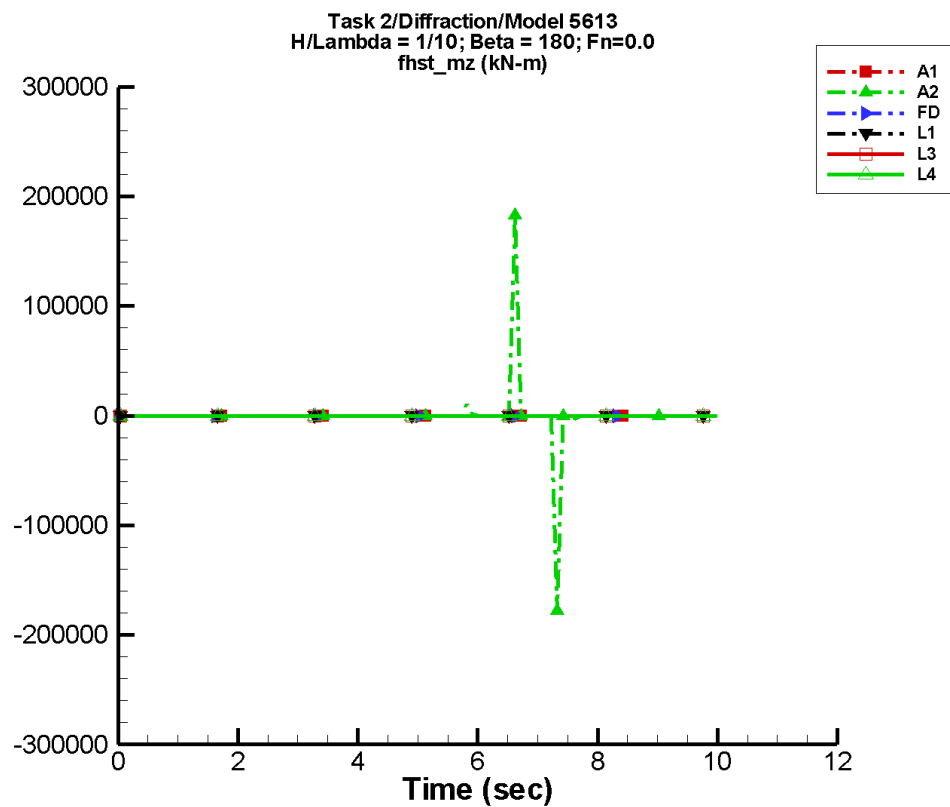
Table G–1317. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	3.24E-05	0.147	150	9.71E-05	121
A2	30.9	112.	21	180.	-10
FD	1.12E-02	4.24E-03	-7	8.89E-03	-113
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.07E-04	1.17E-03	-109	1.73E-03	125

Table G–1318. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.147	0.147	-0.146	0.146
A2	-2.36E+03	1.12E+04	-313.	1.50E+03
FD	-1.66E-02	5.03E-02	-6.63E-03	3.23E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-2.09E-02	1.92E-02	-5.10E-03	4.26E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–660. Time history of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
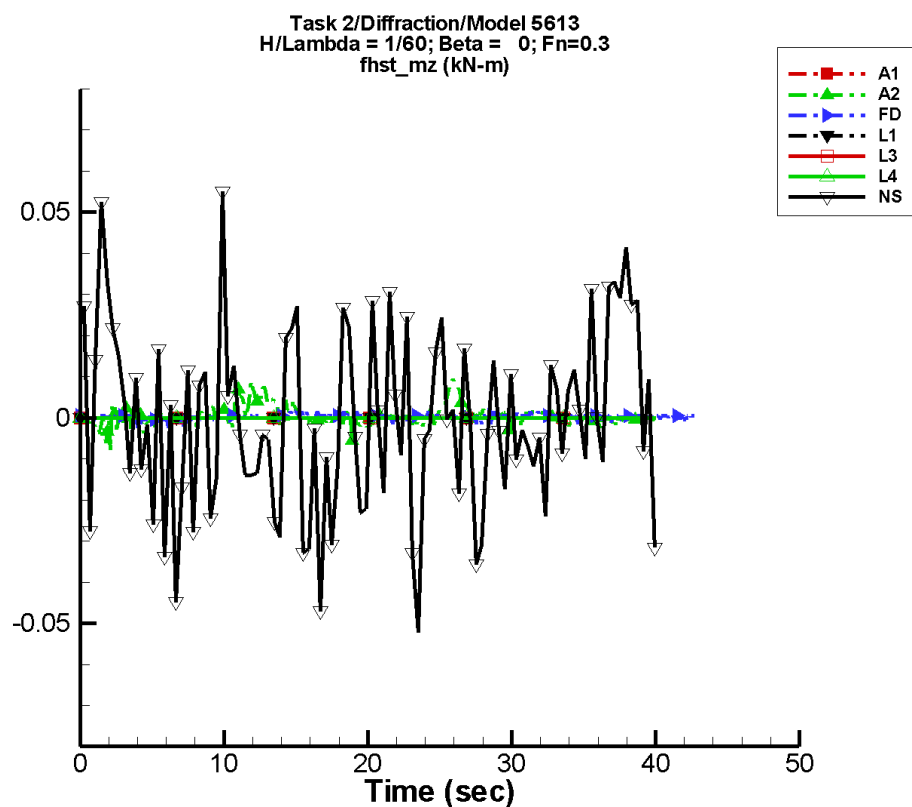
Table G–1319. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	4.86E-05	0.221	150	1.46E-04	121
A2	-475.	1.19E+03	42	1.34E+03	171
FD	5.20E-03	2.56E-03	78	4.63E-03	56
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1320. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.221	0.221	-0.218	0.218
A2	-8.49E+04	3.80E+04	-1.12E+04	5.50E+03
FD	-0.100	9.24E-02	-1.53E-02	2.13E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–661. Time history of M_x^{fk} for one period for $H/\lambda = 1/60, \lambda/L = 1, \beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1321. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
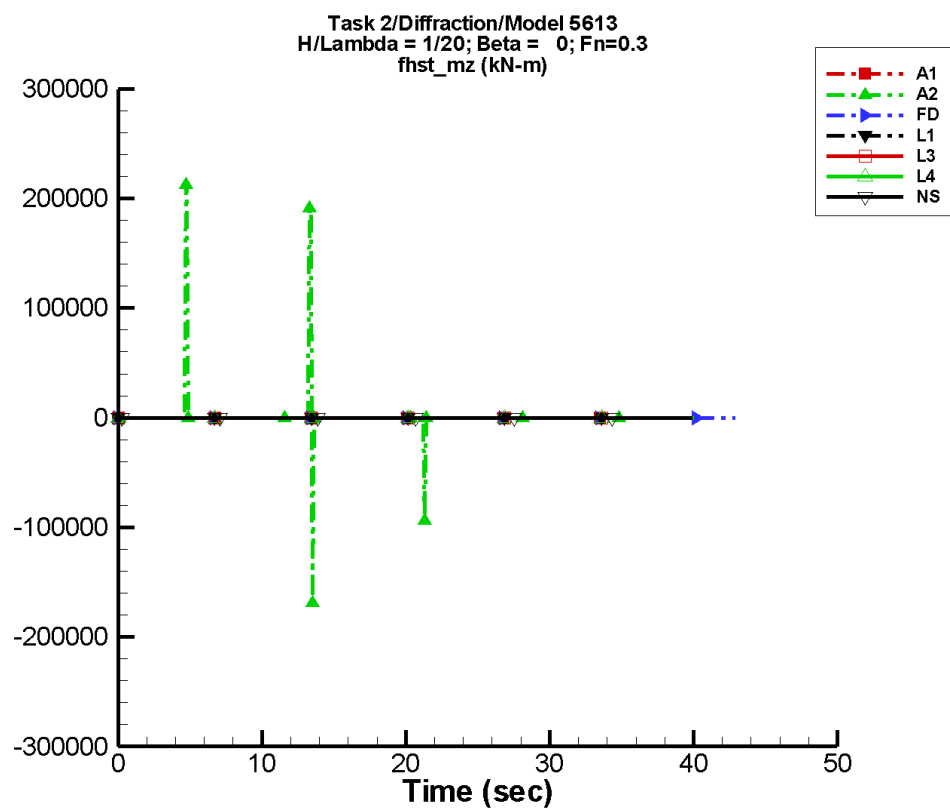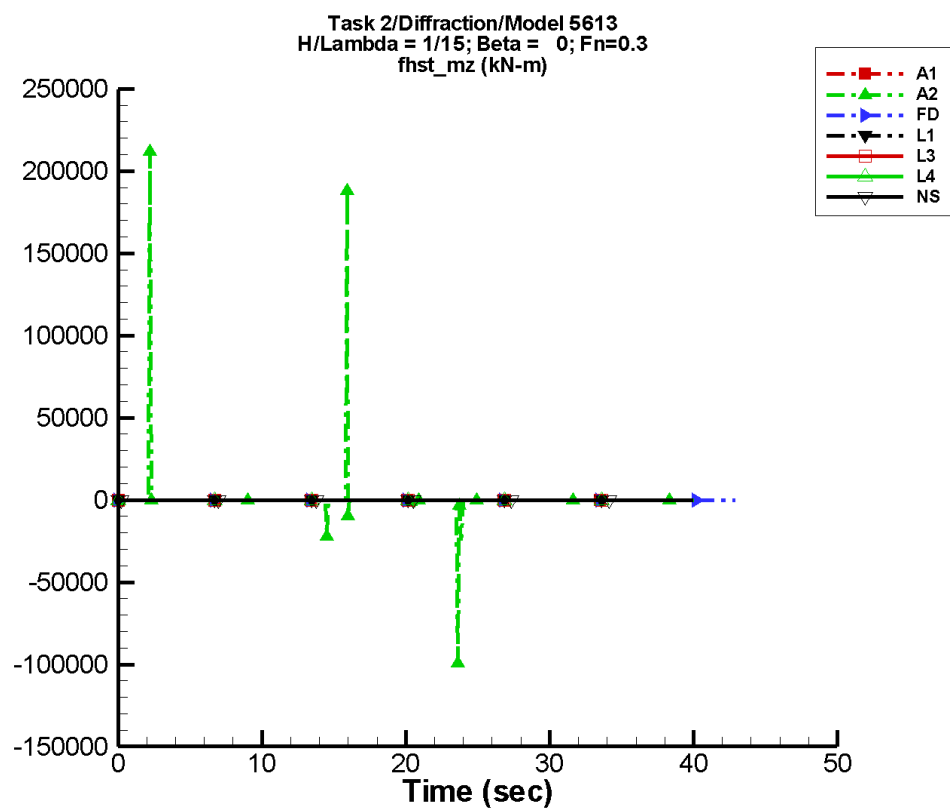
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.19E-06	3.66E-02	-154	1.68E-06	175
A2	-9.61E-05	6.42E-03	-70	4.05E-05	44
FD	-7.75E-05	2.86E-05	-47	1.85E-05	-46
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.77E-04	2.04E-04	41	2.75E-04	149

Table G–1322. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.66E-02	3.66E-02	-3.66E-02	3.66E-02
A2	-6.53E-03	6.53E-03	-6.53E-03	6.43E-03
FD	-8.83E-04	7.50E-04	-3.44E-04	2.59E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-2.65E-03	3.55E-03	-1.33E-03	1.21E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.3
ffk_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–662. Time history of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
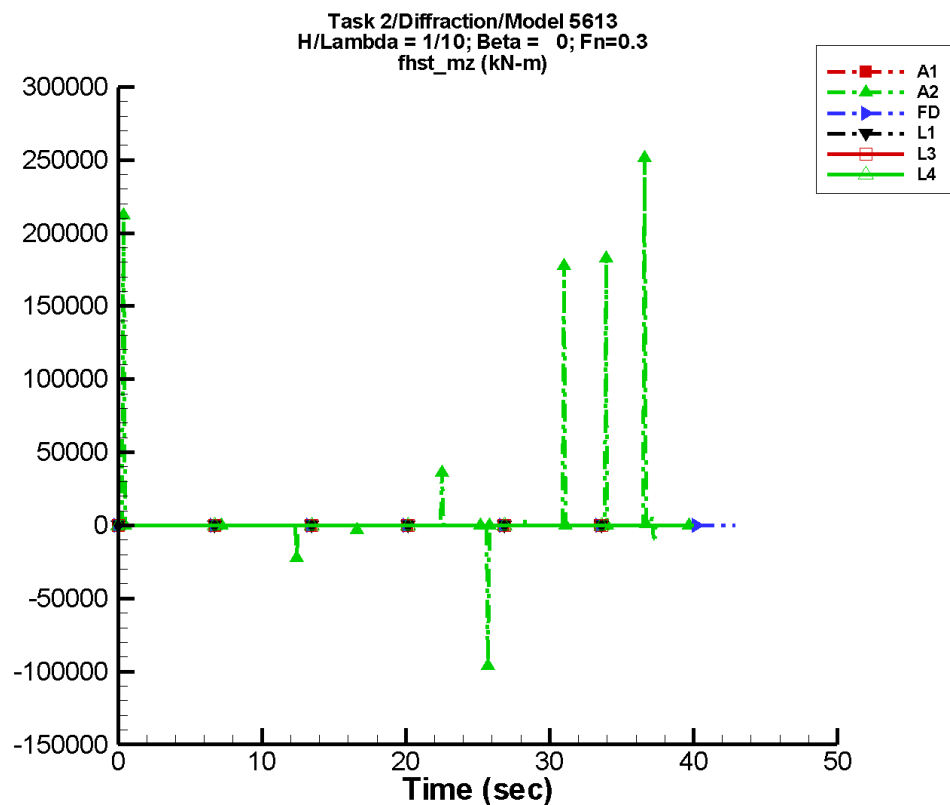
Table G–1323. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	3.56E-06	0.110	-154	5.06E-06	175
A2	-52.9	56.7	-170	69.6	-164
FD	2.75E-06	9.30E-05	-136	2.14E-05	74
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.38E-03	1.45E-03	13	1.32E-03	-120

Table G–1324. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.110	0.110	-0.110	0.110
A2	-6.34E+03	7.76E+03	-1.62E+03	189.
FD	-9.91E-04	9.94E-04	-3.97E-04	5.07E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.09E-02	1.16E-02	-3.98E-03	1.77E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–663. Time history of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
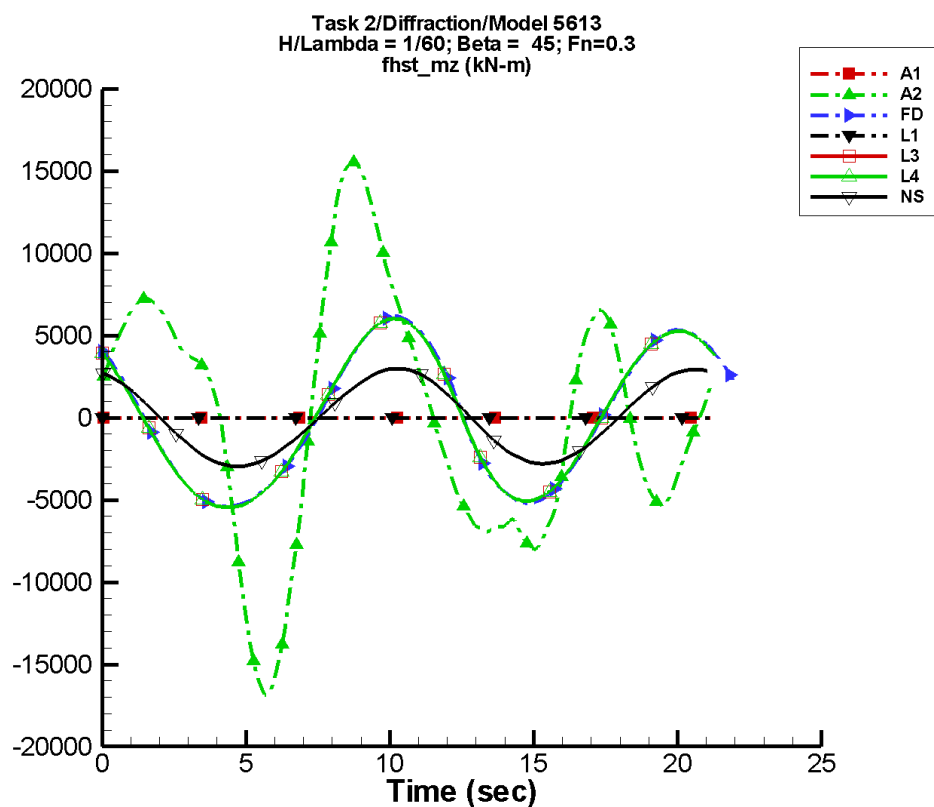
Table G–1325. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	4.76E-06	0.147	-154	6.78E-06	175
A2	-53.3	41.7	93	60.4	-114
FD	5.06E-05	1.84E-04	-66	1.63E-04	44
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-6.46E-04	1.35E-03	117	3.15E-03	42

Table G–1326. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.147	0.147	-0.147	0.147
A2	-5.34E+03	176.	-1.07E+03	72.5
FD	-1.08E-03	1.21E-03	-4.91E-04	5.38E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.76E-02	1.41E-02	-5.87E-03	5.86E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 0; Fn=0.3
ffk_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–664. Time history of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
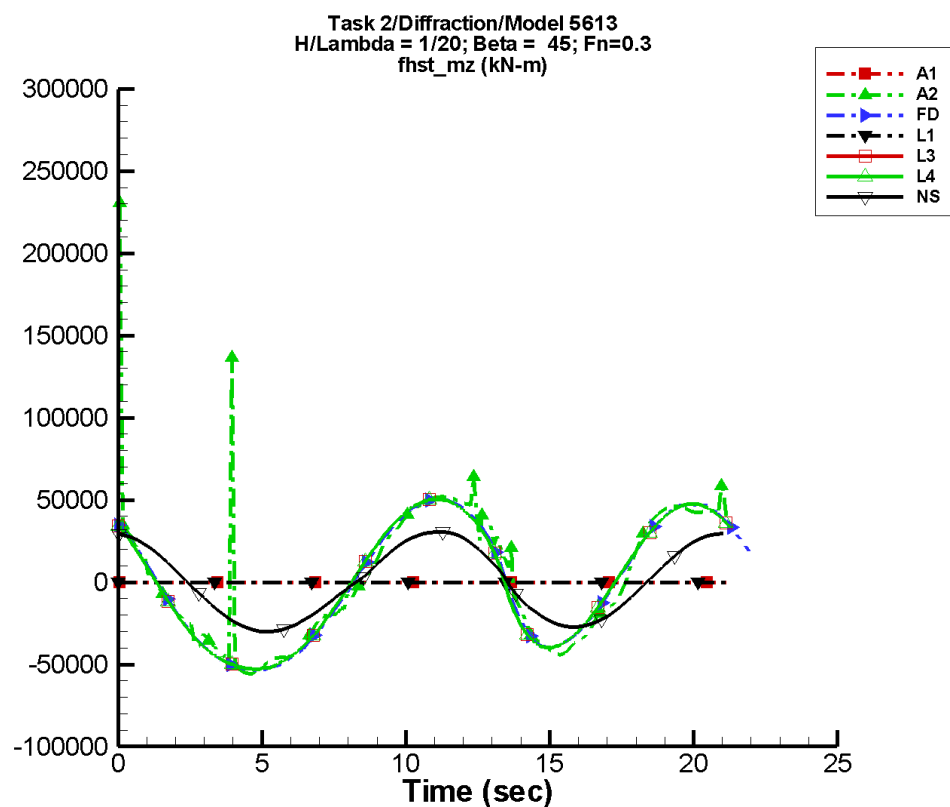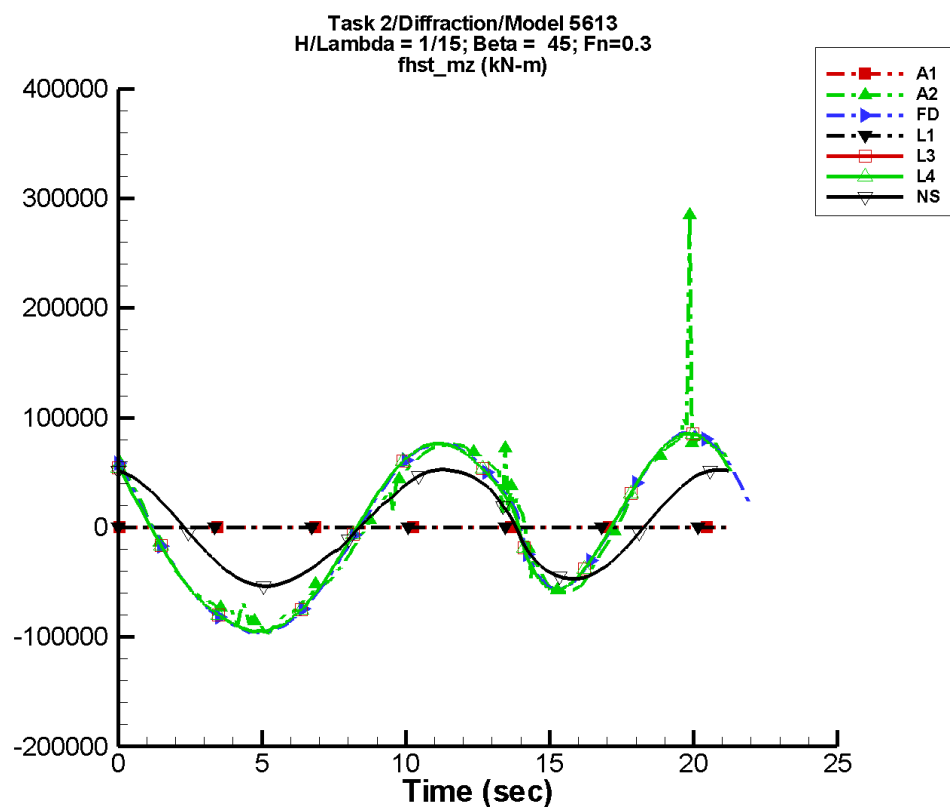
Table G–1327. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	7.16E-06	0.221	-154	1.01E-05	175
A2	-543.	954.	-42	826.	15
FD	-3.91E-06	2.80E-04	-67	1.40E-04	21
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1328. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.221	0.221	-0.220	0.220
A2	-8.85E+04	1.97E+03	-1.19E+04	1.11E+03
FD	-1.30E-03	1.75E-03	-7.01E-04	5.73E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–665. Time history of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
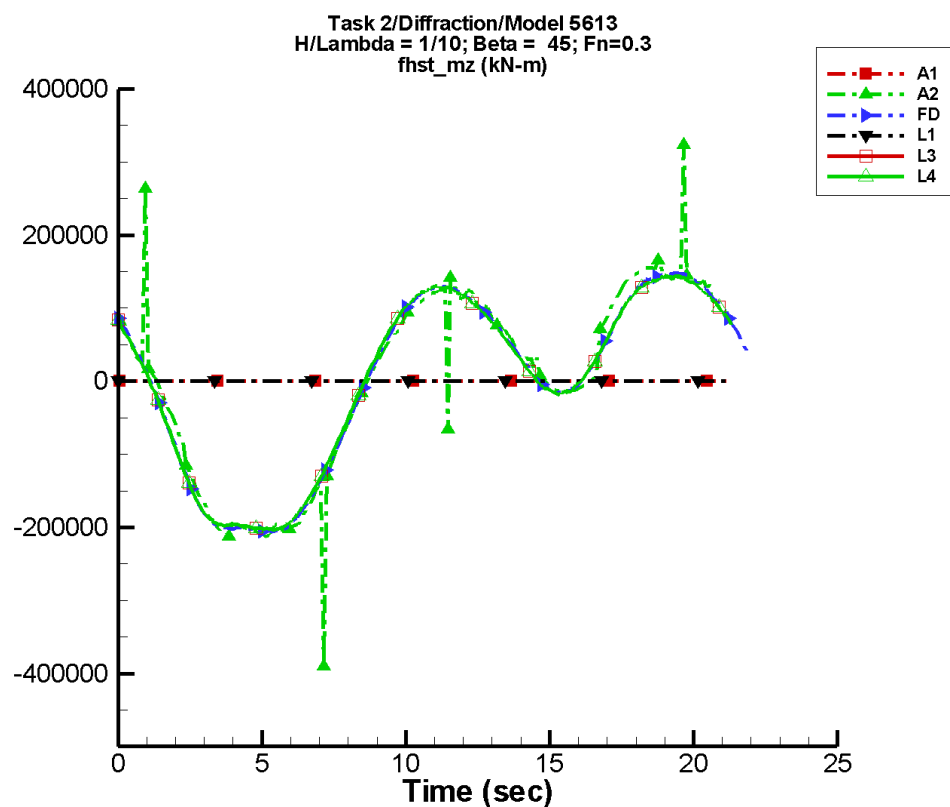
Table G–1329. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-0.531	8.18E+03	-53	1.49	65
A2	-3.44	7.45E+03	-57	1.04E+03	28
FD	-4.99	7.37E+03	-53	810.	40
L1	-0.169	8.18E+03	-53	0.657	62
L3	-4.92	7.30E+03	-57	812.	35
L4	-4.92	7.30E+03	-57	812.	35
NF	—	—	—	—	—
NS	-1.60	7.47E+03	-59	569.	23

Table G–1330. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-8.18E+03	8.18E+03	-8.17E+03	8.17E+03
A2	-8.04E+03	6.88E+03	-7.98E+03	6.86E+03
FD	-7.58E+03	6.79E+03	-7.56E+03	6.77E+03
L1	-8.18E+03	8.18E+03	-8.18E+03	8.18E+03
L3	-7.43E+03	6.72E+03	-7.42E+03	6.72E+03
L4	-7.43E+03	6.72E+03	-7.42E+03	6.72E+03
NF	—	—	—	—
NS	-7.59E+03	7.00E+03	-7.52E+03	6.94E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–666. Time history of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
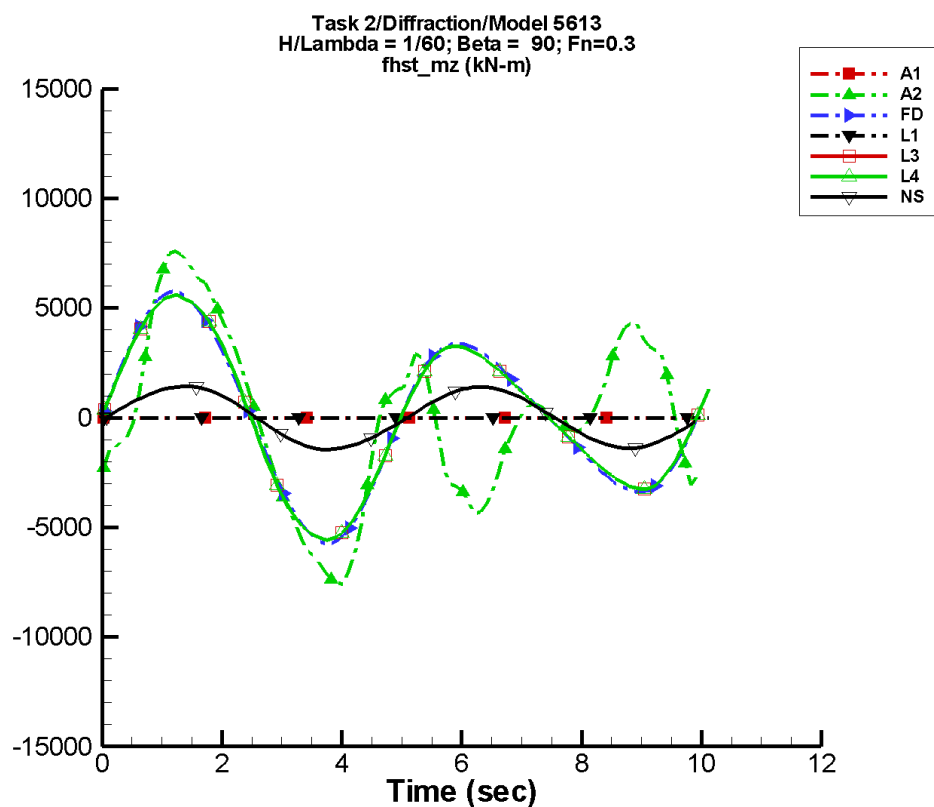
Table G–1331. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-1.60	2.46E+04	-53	4.47	65
A2	-216.	2.00E+04	-64	3.81E+03	-11
FD	3.93	1.96E+04	-59	4.34E+03	10
L1	-0.511	2.45E+04	-53	1.97	62
L3	-66.6	1.83E+04	-65	4.24E+03	4
L4	-66.6	1.83E+04	-65	4.24E+03	4
NF	—	—	—	—	—
NS	-134.	1.93E+04	-67	2.80E+03	-5

Table G–1332. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
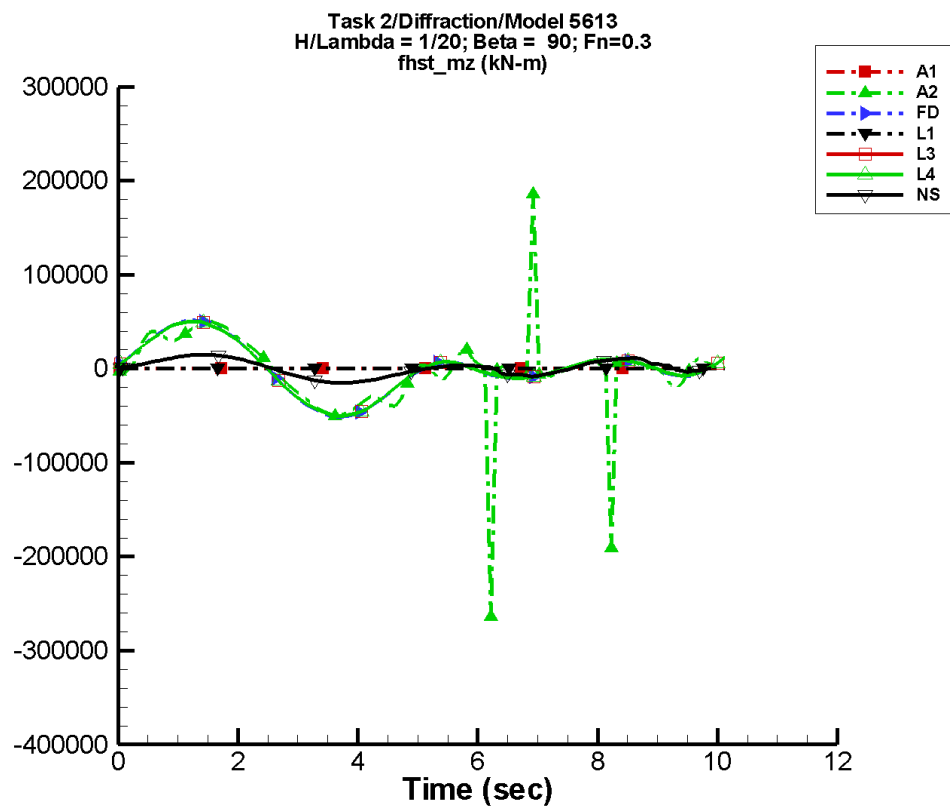
Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.46E+04	2.46E+04	-2.46E+04	2.46E+04
A2	-2.49E+04	1.78E+04	-2.45E+04	1.61E+04
FD	-2.21E+04	1.75E+04	-2.20E+04	1.65E+04
L1	-2.45E+04	2.45E+04	-2.45E+04	2.45E+04
L3	-2.02E+04	1.85E+04	-2.02E+04	1.78E+04
L4	-2.02E+04	1.85E+04	-2.02E+04	1.78E+04
NF	—	—	—	—
NS	-2.03E+04	1.65E+04	-2.01E+04	1.61E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 45; Fn=0.3
ffk_mx (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–667. Time history of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
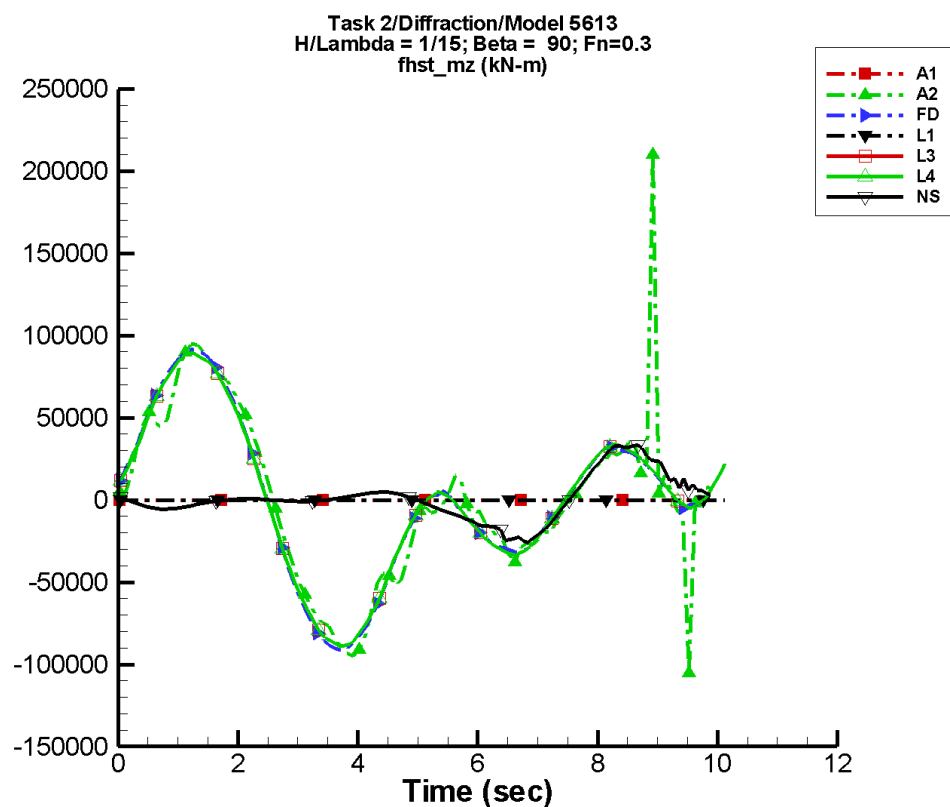
Table G–1333. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-2.14	3.29E+04	-53	5.97	65
A2	-55.1	2.35E+04	-63	2.06E+03	-13
FD	-11.1	2.33E+04	-59	3.48E+03	-13
L1	-0.672	3.27E+04	-53	2.62	62
L3	-19.5	2.06E+04	-64	2.76E+03	-28
L4	-19.5	2.06E+04	-64	2.76E+03	-28
NF	—	—	—	—	—
NS	-436.	2.40E+04	-69	4.36E+03	-17

Table G–1334. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.29E+04	3.29E+04	-3.28E+04	3.28E+04
A2	-3.34E+04	2.18E+04	-2.84E+04	2.16E+04
FD	-2.61E+04	2.12E+04	-2.60E+04	2.10E+04
L1	-3.27E+04	3.27E+04	-3.27E+04	3.27E+04
L3	-2.22E+04	1.86E+04	-2.21E+04	1.85E+04
L4	-2.22E+04	1.86E+04	-2.21E+04	1.85E+04
NF	—	—	—	—
NS	-2.62E+04	2.12E+04	-2.61E+04	2.01E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–668. Time history of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
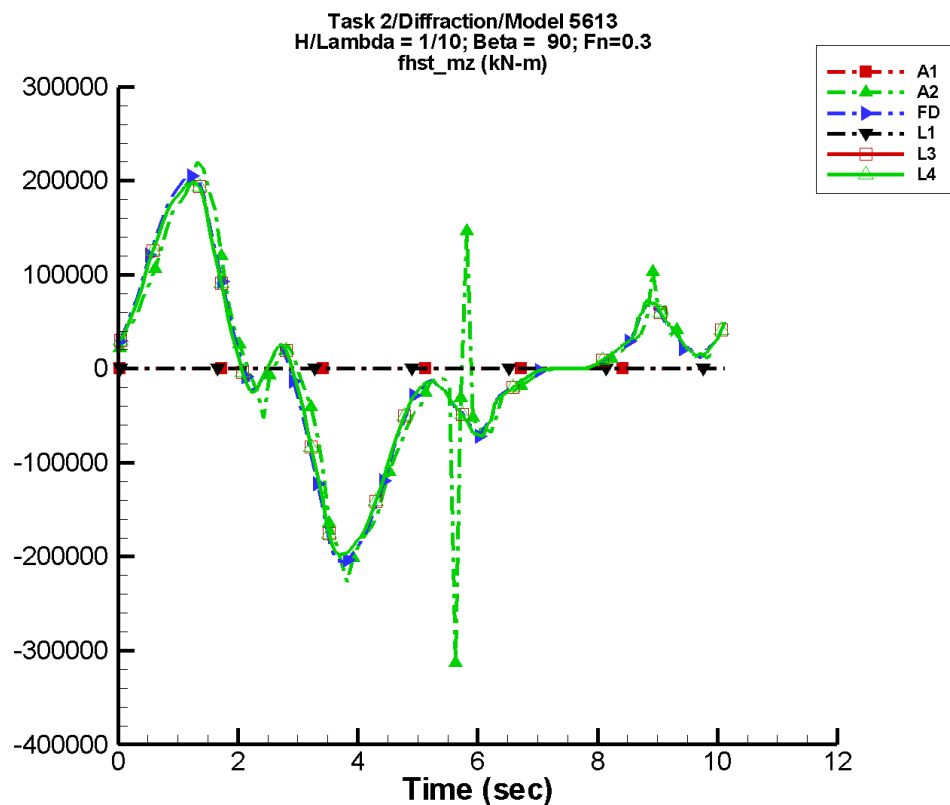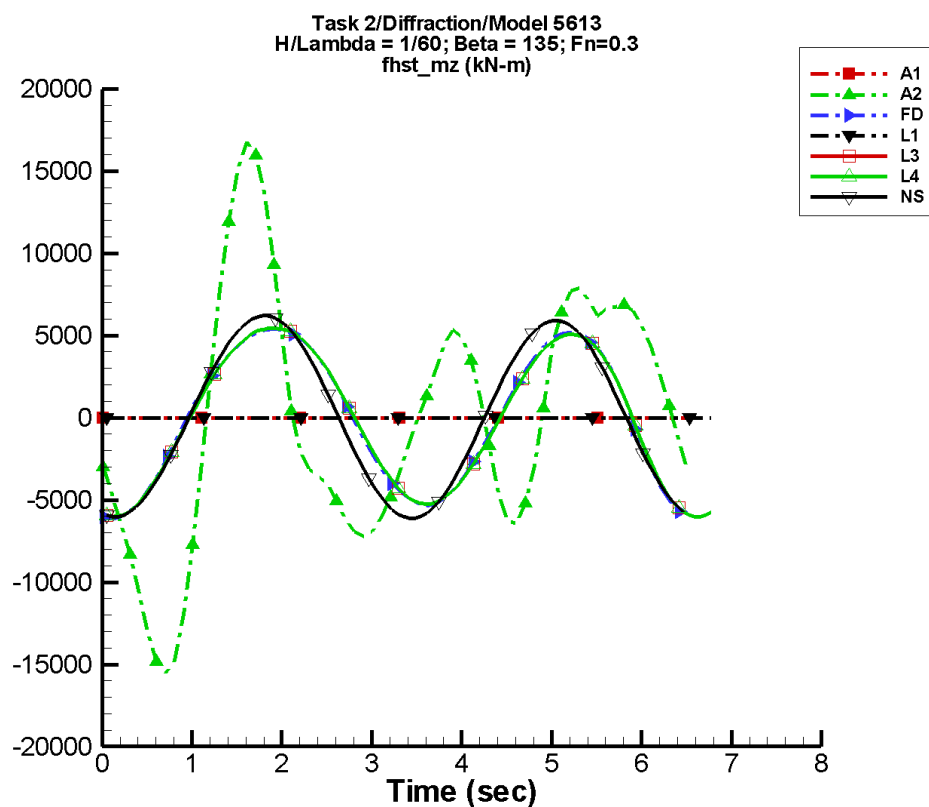
Table G–1335. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-3.21	4.93E+04	-53	8.96	65
A2	-1.16E+03	4.31E+04	-71	7.32E+03	-134
FD	-449.	3.87E+04	-66	5.27E+03	-151
L1	-1.02	4.91E+04	-53	3.93	62
L3	-168.	3.27E+04	-71	4.96E+03	-157
L4	-168.	3.27E+04	-71	4.96E+03	-157
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1336. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.93E+04	4.93E+04	-4.92E+04	4.92E+04
A2	-1.46E+05	4.33E+04	-6.97E+04	4.36E+04
FD	-4.63E+04	4.10E+04	-4.46E+04	4.03E+04
L1	-4.91E+04	4.91E+04	-4.91E+04	4.91E+04
L3	-3.78E+04	3.45E+04	-3.73E+04	3.39E+04
L4	-3.78E+04	3.45E+04	-3.73E+04	3.39E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–669. Time history of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1337. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
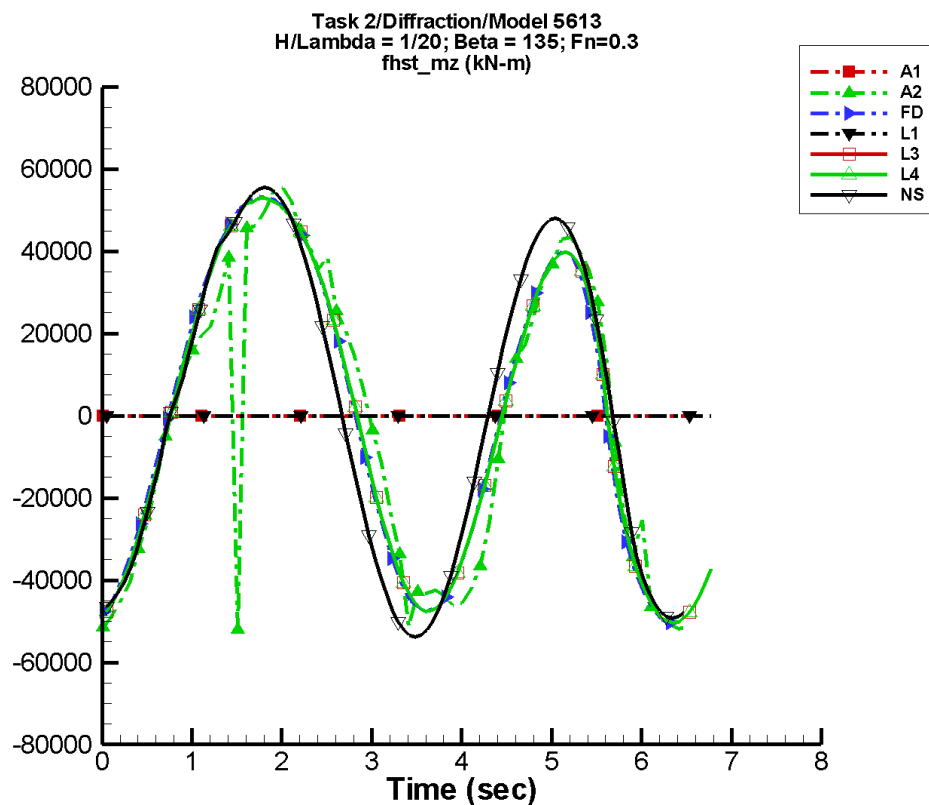
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	13.5	1.68E+04	-94	18.8	-156
A2	-6.89	1.42E+04	-98	1.03E+03	169
FD	-41.9	1.43E+04	-97	1.55E+03	161
L1	4.26	1.68E+04	-94	6.79	151
L3	-11.7	1.40E+04	-94	811.	179
L4	-11.7	1.40E+04	-94	811.	179
NF	—	—	—	—	—
NS	55.5	1.36E+04	-92	858.	177

Table G–1338. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.68E+04	1.68E+04	-1.68E+04	1.66E+04
A2	-1.68E+04	1.67E+04	-1.64E+04	1.58E+04
FD	-1.59E+04	1.60E+04	-1.59E+04	1.56E+04
L1	-1.68E+04	1.68E+04	-1.68E+04	1.67E+04
L3	-1.56E+04	1.56E+04	-1.57E+04	1.55E+04
L4	-1.56E+04	1.56E+04	-1.57E+04	1.55E+04
NF	—	—	—	—
NS	-1.44E+04	1.46E+04	-1.44E+04	1.44E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–670. Time history of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
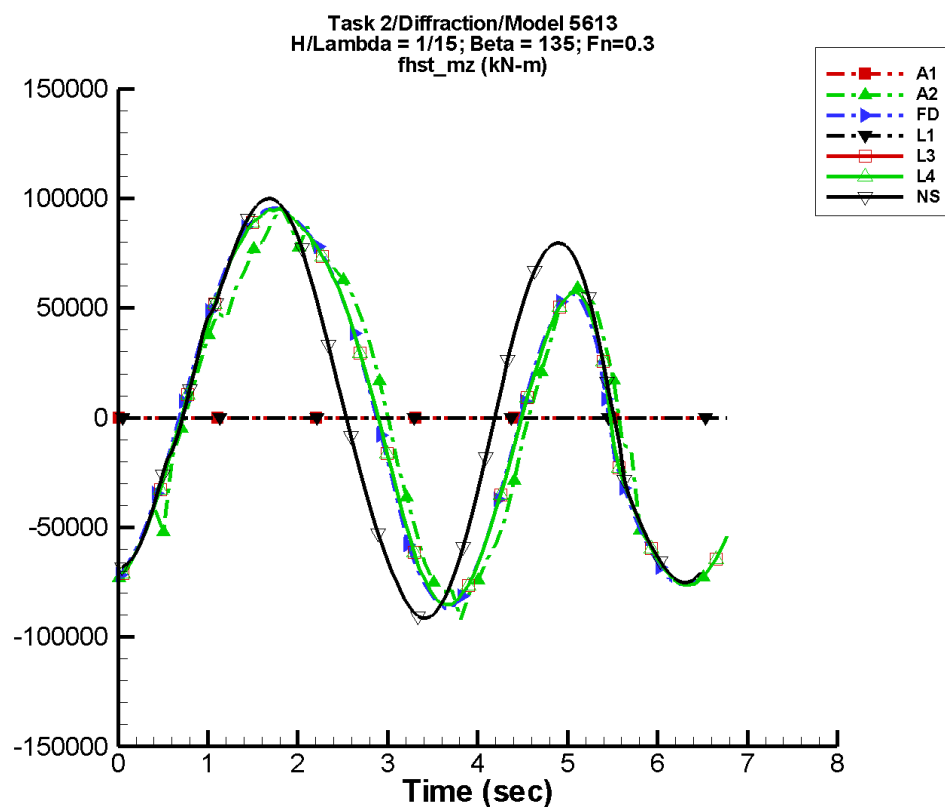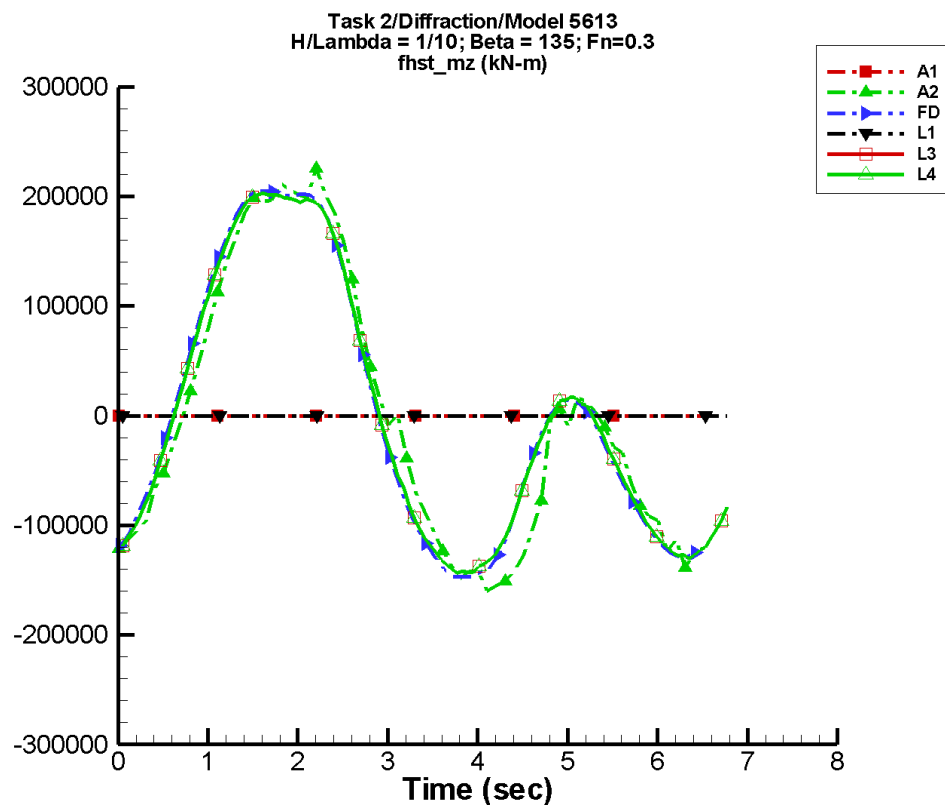
Table G–1339. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	40.5	5.05E+04	-94	56.5	-156
A2	-109.	3.88E+04	-98	2.18E+04	164
FD	-64.6	3.83E+04	-97	1.76E+04	163
L1	12.8	5.03E+04	-94	20.4	151
L3	70.4	3.51E+04	-94	1.30E+04	172
L4	70.4	3.51E+04	-94	1.30E+04	172
NF	—	—	—	—	—
NS	56.8	3.50E+04	-91	1.44E+04	172

Table G–1340. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-5.05E+04	5.05E+04	-5.05E+04	4.99E+04
A2	-5.05E+04	5.01E+04	-4.70E+04	4.69E+04
FD	-4.64E+04	4.64E+04	-4.56E+04	4.56E+04
L1	-5.03E+04	5.03E+04	-5.04E+04	5.01E+04
L3	-4.28E+04	4.28E+04	-4.26E+04	4.22E+04
L4	-4.28E+04	4.28E+04	-4.26E+04	4.22E+04
NF	—	—	—	—
NS	-4.07E+04	4.27E+04	-4.01E+04	4.19E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.3
ffk_mx (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–671. Time history of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
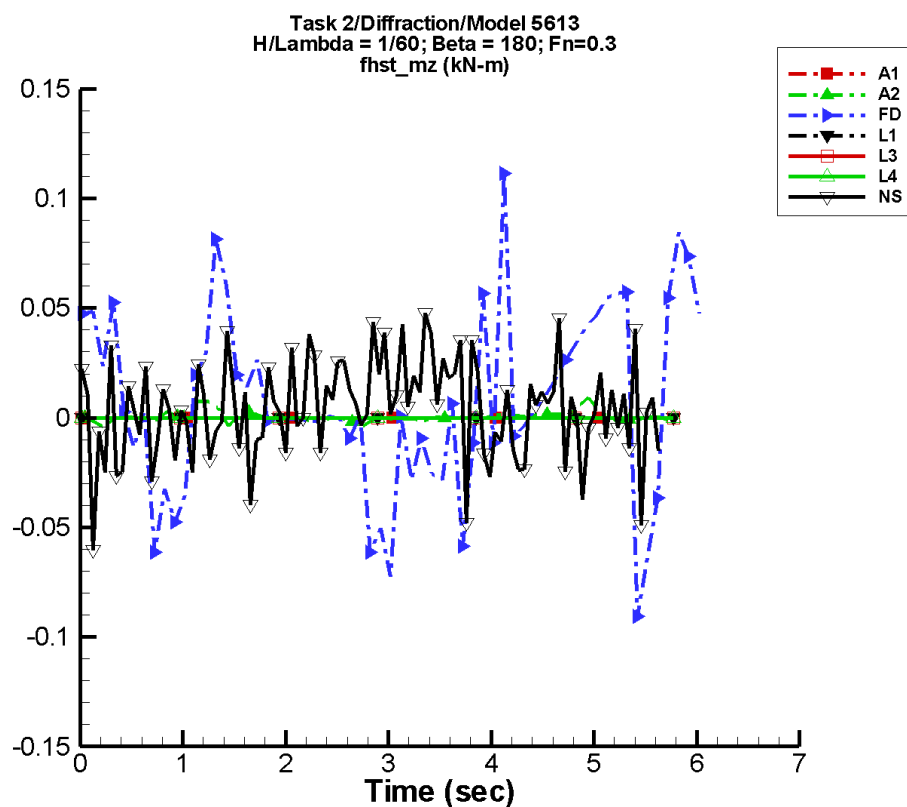
Table G–1341. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	54.1	6.74E+04	-94	75.5	-156
A2	-22.7	5.03E+04	-98	4.57E+04	163
FD	-150.	4.89E+04	-97	4.25E+04	162
L1	17.0	6.70E+04	-94	27.2	151
L3	318.	4.23E+04	-93	3.50E+04	171
L4	318.	4.23E+04	-93	3.50E+04	171
NF	—	—	—	—	—
NS	-161.	4.18E+04	-91	3.07E+04	172

Table G–1342. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-6.74E+04	6.74E+04	-6.74E+04	6.67E+04
A2	-7.82E+04	7.81E+04	-7.52E+04	7.52E+04
FD	-7.45E+04	7.45E+04	-7.26E+04	7.25E+04
L1	-6.70E+04	6.70E+04	-6.73E+04	6.68E+04
L3	-5.94E+04	5.94E+04	-5.89E+04	5.89E+04
L4	-5.94E+04	5.94E+04	-5.89E+04	5.89E+04
NF	—	—	—	—
NS	-5.67E+04	5.87E+04	-5.60E+04	5.80E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.3
ffk_mx (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–672. Time history of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
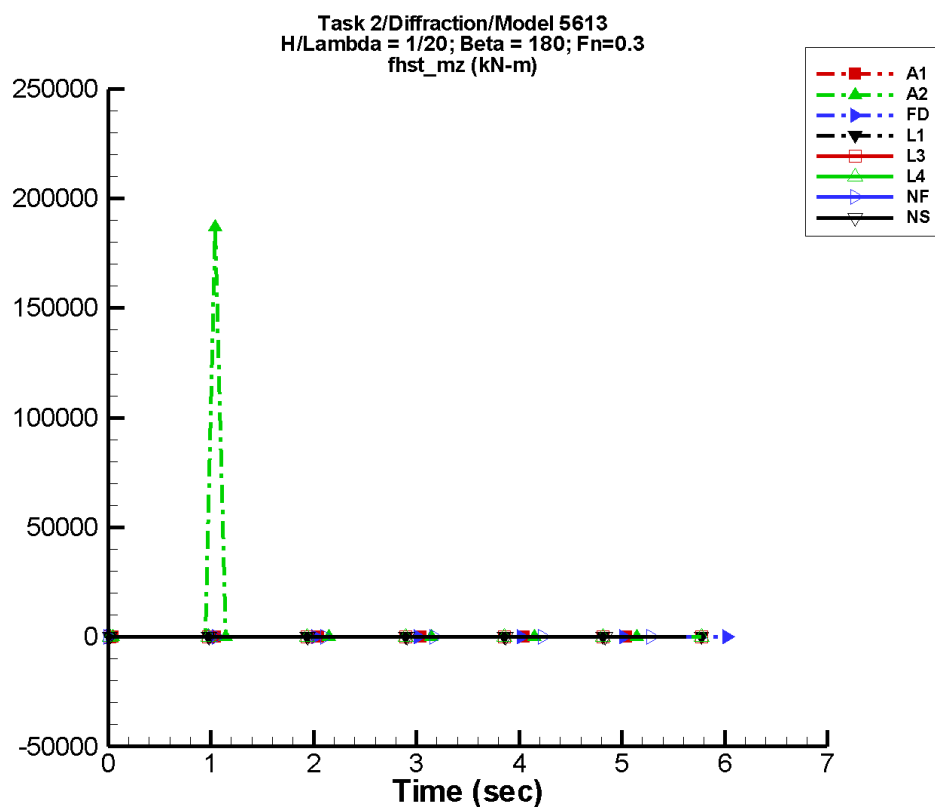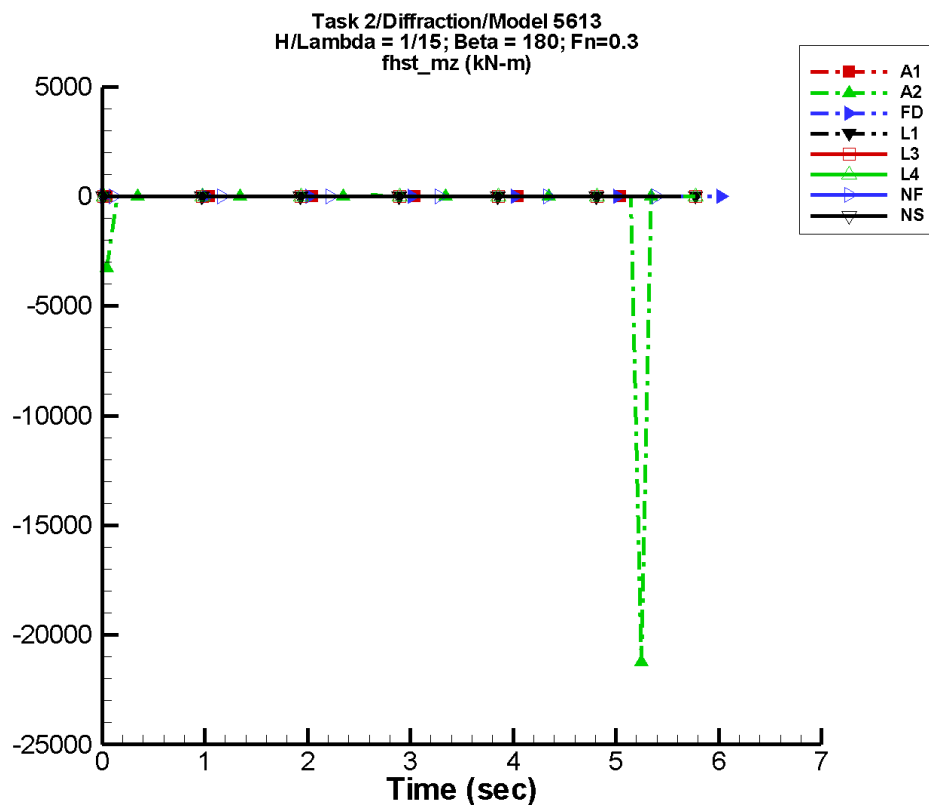
Table G–1343. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	81.2	1.01E+05	-94	113.	-156
A2	291.	9.52E+04	-99	1.05E+05	163
FD	872.	8.57E+04	-99	9.46E+04	166
L1	25.6	1.01E+05	-94	40.8	151
L3	-136.	7.15E+04	-95	7.91E+04	171
L4	-136.	7.15E+04	-95	7.91E+04	171
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1344. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.01E+05	1.01E+05	-1.01E+05	1.00E+05
A2	-2.33E+05	2.32E+05	-2.03E+05	2.02E+05
FD	-1.94E+05	1.92E+05	-1.71E+05	1.71E+05
L1	-1.01E+05	1.01E+05	-1.01E+05	1.00E+05
L3	-1.56E+05	1.56E+05	-1.52E+05	1.52E+05
L4	-1.56E+05	1.56E+05	-1.52E+05	1.52E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–673. Time history of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
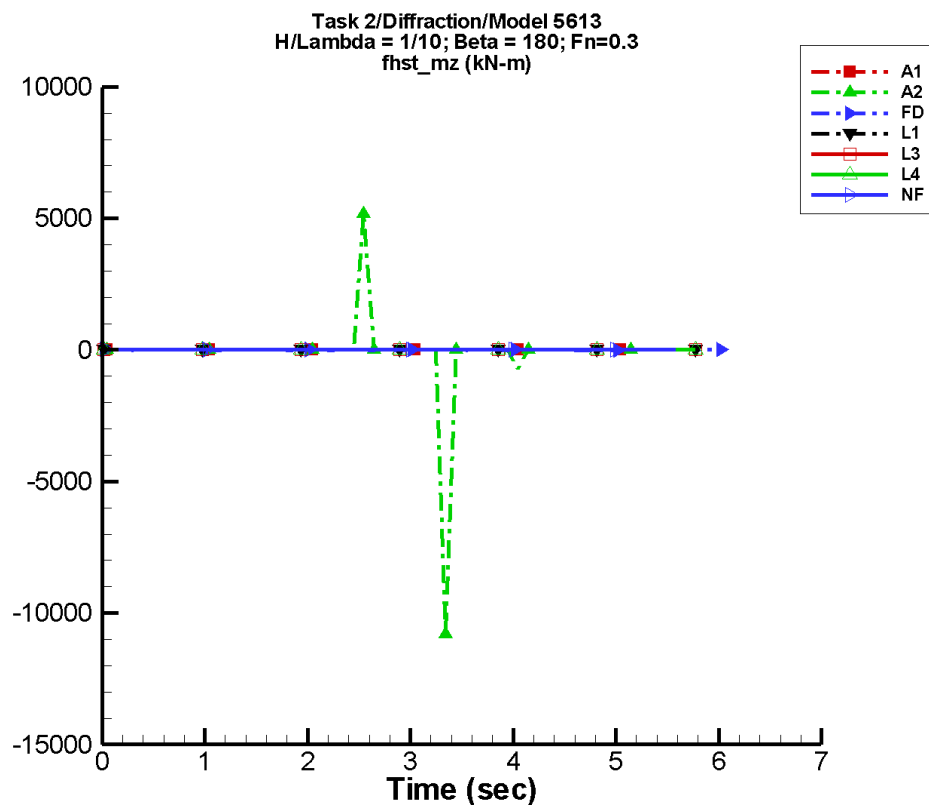
Table G–1345. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	4.47	8.18E+03	-128	6.72	171
A2	13.5	7.39E+03	-131	1.09E+03	-45
FD	16.5	7.30E+03	-120	854.	-27
L1	0.871	8.18E+03	-129	1.38	123
L3	7.31	7.23E+03	-125	853.	-38
L4	7.31	7.23E+03	-125	853.	-38
NF	—	—	—	—	—
NS	53.1	7.22E+03	-120	389.	-15

Table G–1346. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-8.18E+03	8.18E+03	-8.00E+03	7.98E+03
A2	-6.88E+03	8.02E+03	-6.75E+03	7.73E+03
FD	-6.79E+03	7.58E+03	-6.70E+03	7.39E+03
L1	-8.18E+03	8.18E+03	-8.12E+03	8.11E+03
L3	-6.72E+03	7.43E+03	-6.70E+03	7.37E+03
L4	-6.72E+03	7.43E+03	-6.70E+03	7.37E+03
NF	—	—	—	—
NS	-6.70E+03	7.33E+03	-6.66E+03	7.26E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–674. Time history of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
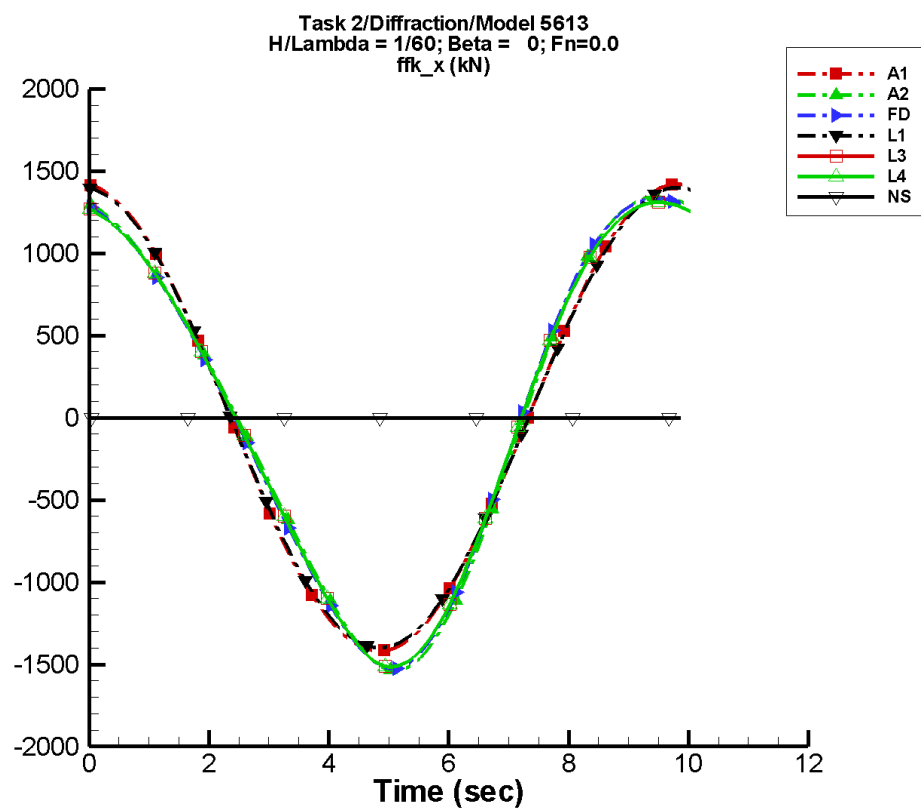
Table G–1347. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	13.4	2.46E+04	-128	20.2	171
A2	27.3	2.00E+04	-126	3.97E+03	-1
FD	0.895	1.94E+04	-115	4.53E+03	5
L1	2.62	2.45E+04	-129	4.14	123
L3	49.4	1.82E+04	-118	4.26E+03	-6
L4	49.4	1.82E+04	-118	4.26E+03	-6
NF	—	—	—	—	—
NS	159.	1.90E+04	-113	3.61E+03	15

Table G–1348. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
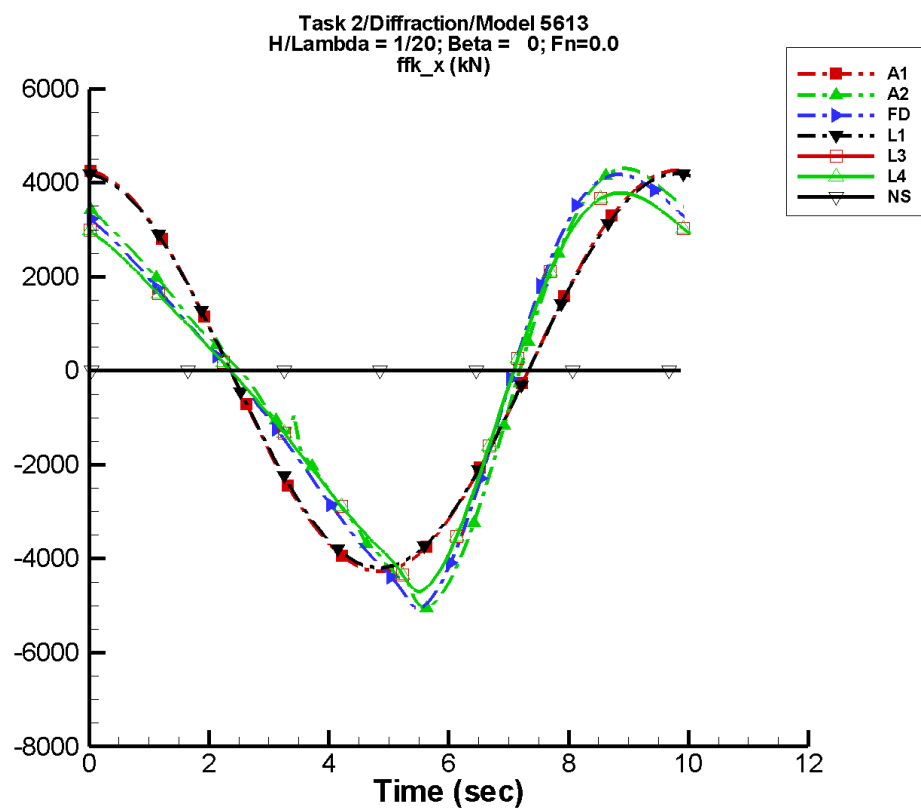
Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.46E+04	2.46E+04	-2.41E+04	2.40E+04
A2	-1.66E+04	2.47E+04	-1.61E+04	2.17E+04
FD	-1.69E+04	2.21E+04	-1.56E+04	2.14E+04
L1	-2.45E+04	2.45E+04	-2.44E+04	2.43E+04
L3	-1.83E+04	2.02E+04	-1.57E+04	2.00E+04
L4	-1.83E+04	2.02E+04	-1.57E+04	2.00E+04
NF	—	—	—	—
NS	-1.76E+04	2.06E+04	-1.51E+04	2.04E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–675. Time history of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
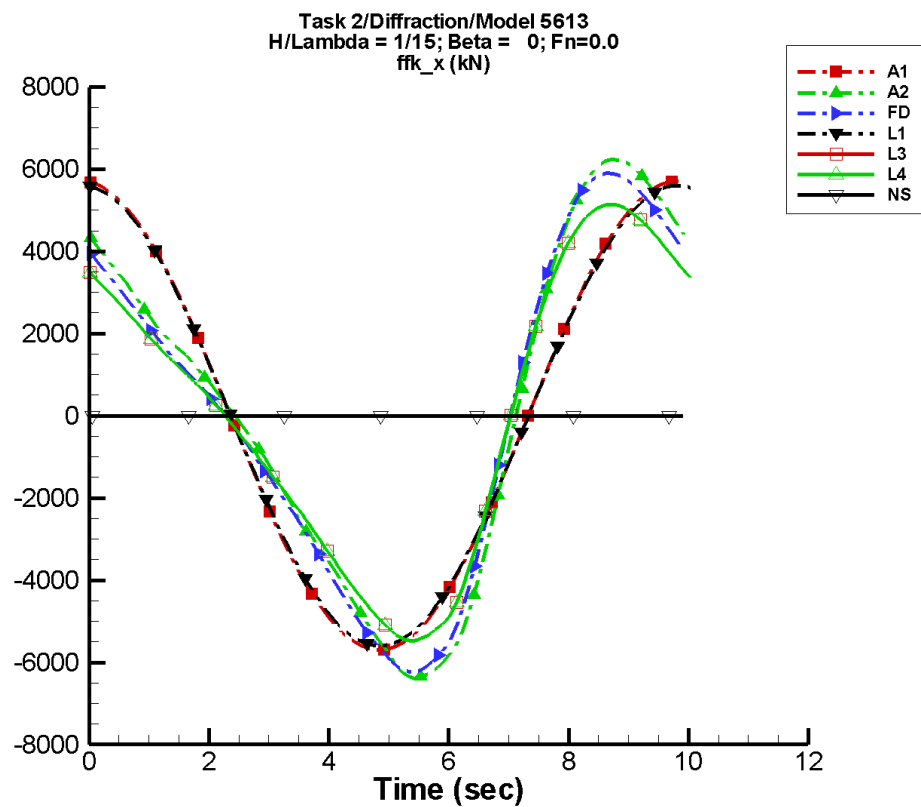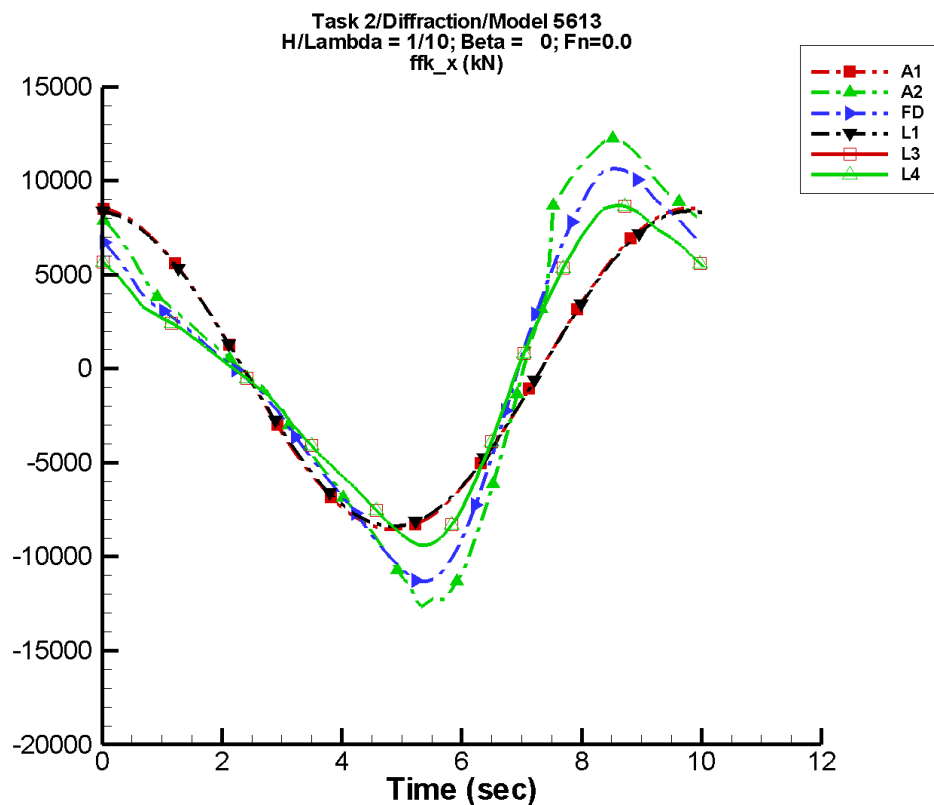
Table G–1349. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	17.9	3.29E+04	-128	27.0	171
A2	-78.9	2.41E+04	-126	2.51E+03	18
FD	-70.9	2.35E+04	-115	3.44E+03	26
L1	3.48	3.27E+04	-129	5.53	123
L3	-21.6	2.07E+04	-118	2.77E+03	22
L4	-21.6	2.07E+04	-118	2.77E+03	22
NF	—	—	—	—	—
NS	-122.	2.25E+04	-105	3.81E+03	88

Table G–1350. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.29E+04	3.28E+04	-3.21E+04	3.21E+04
A2	-2.22E+04	2.82E+04	-2.14E+04	2.72E+04
FD	-2.11E+04	2.61E+04	-2.07E+04	2.52E+04
L1	-3.27E+04	3.27E+04	-3.25E+04	3.25E+04
L3	-1.86E+04	2.21E+04	-1.84E+04	2.19E+04
L4	-1.86E+04	2.21E+04	-1.84E+04	2.19E+04
NF	—	—	—	—
NS	-2.19E+04	2.58E+04	-2.04E+04	2.55E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–676. Time history of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
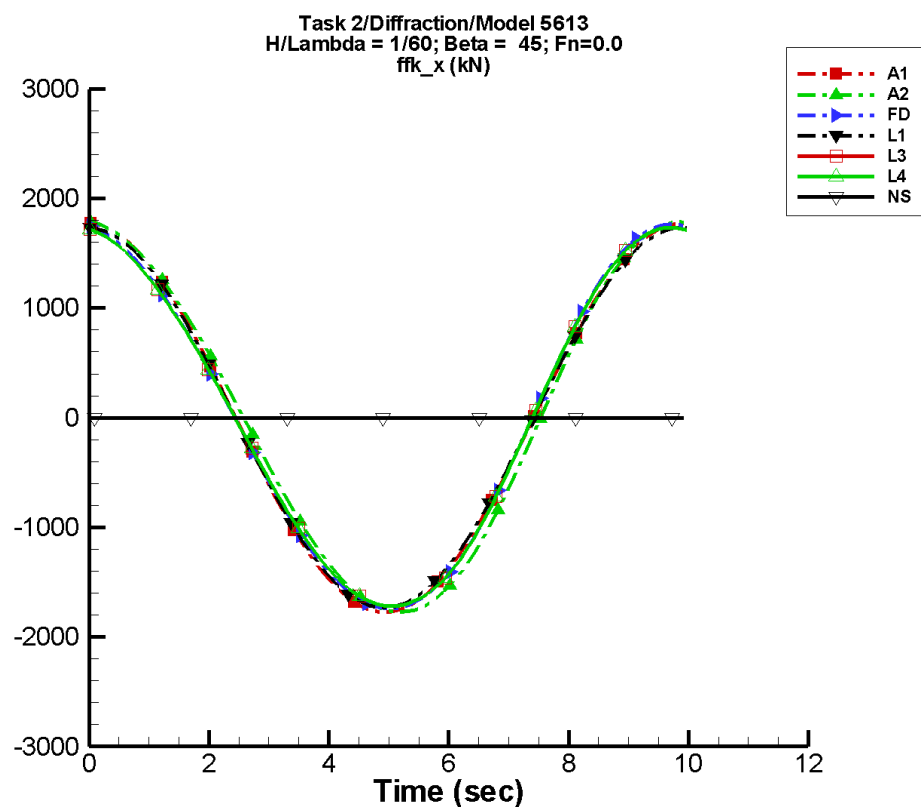
Table G–1351. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	26.9	4.93E+04	-128	40.5	171
A2	278.	4.10E+04	-116	3.39E+03	152
FD	220.	3.76E+04	-107	4.28E+03	-177
L1	5.23	4.91E+04	-129	8.30	123
L3	-45.6	3.16E+04	-112	3.24E+03	160
L4	-45.6	3.16E+04	-112	3.24E+03	160
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1352. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-4.93E+04	4.93E+04	-4.82E+04	4.81E+04
A2	-4.36E+04	6.04E+04	-4.24E+04	4.78E+04
FD	-4.11E+04	4.64E+04	-3.96E+04	4.00E+04
L1	-4.91E+04	4.91E+04	-4.87E+04	4.87E+04
L3	-3.44E+04	3.78E+04	-3.36E+04	3.64E+04
L4	-3.44E+04	3.78E+04	-3.36E+04	3.64E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–677. Time history of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

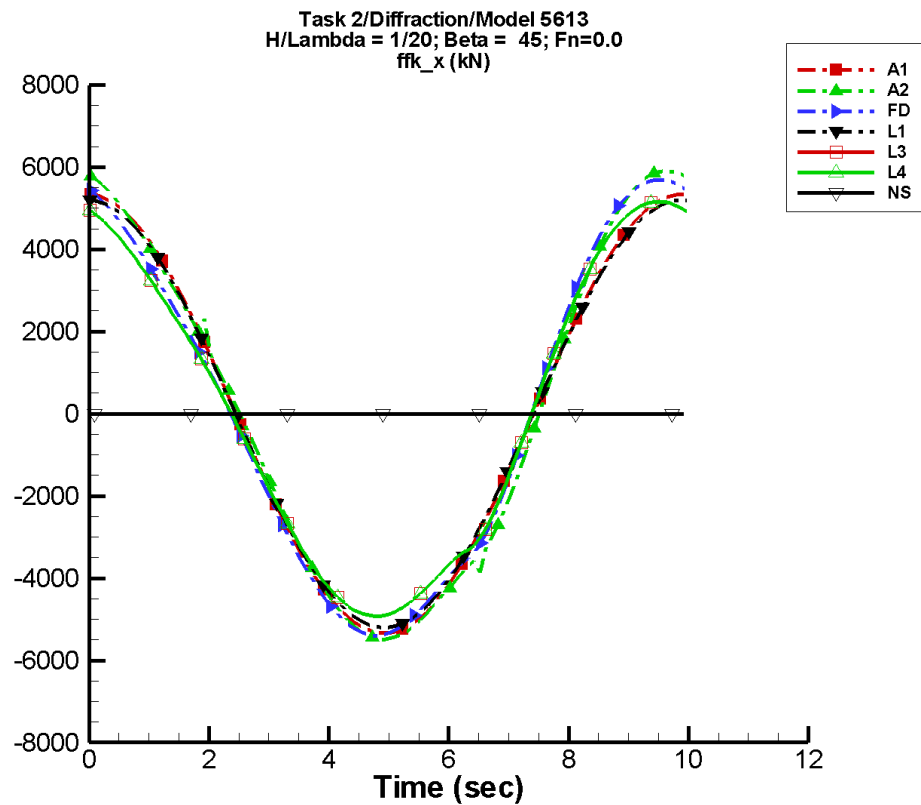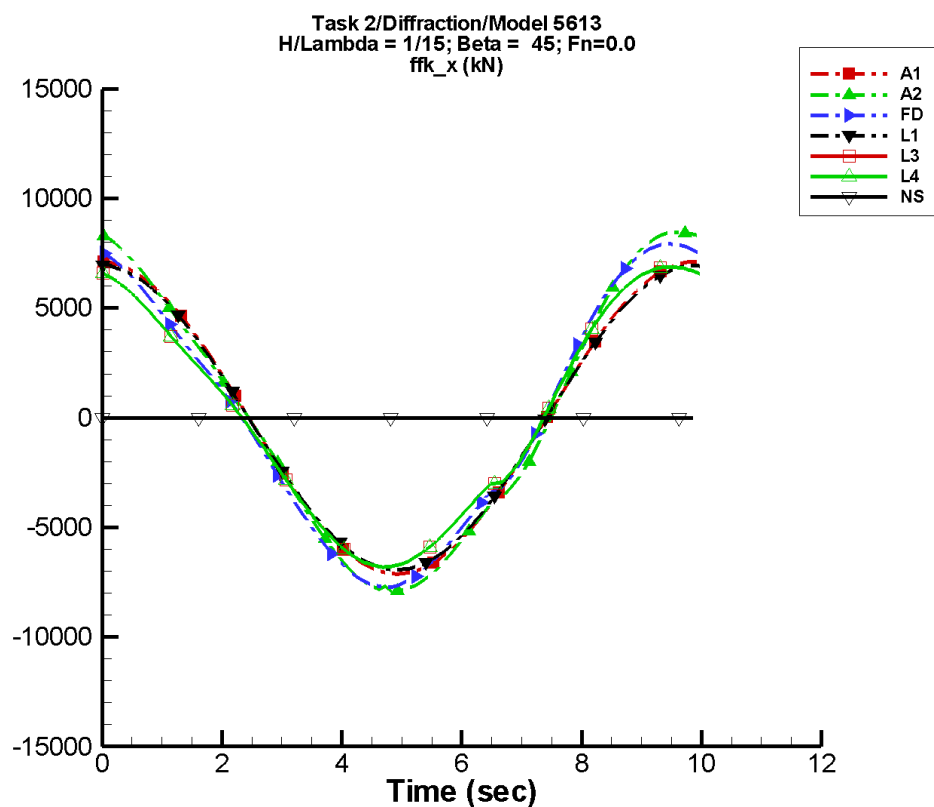Table G–1353. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.24E-05	3.66E-02	146	3.55E-05	135
A2	-1.09E-04	6.42E-03	55	4.77E-05	86
FD	1.80E-04	2.90E-03	32	3.38E-03	-97
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-7.45E-05	1.95E-04	-140	5.28E-04	26

Table G–1354. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.66E-02	3.66E-02	-3.55E-02	3.55E-02
A2	-6.53E-03	6.47E-03	-6.33E-03	6.19E-03
FD	-1.62E-02	2.50E-02	-6.88E-03	1.40E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-5.89E-03	4.74E-03	-1.37E-03	8.88E-04

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–678. Time history of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
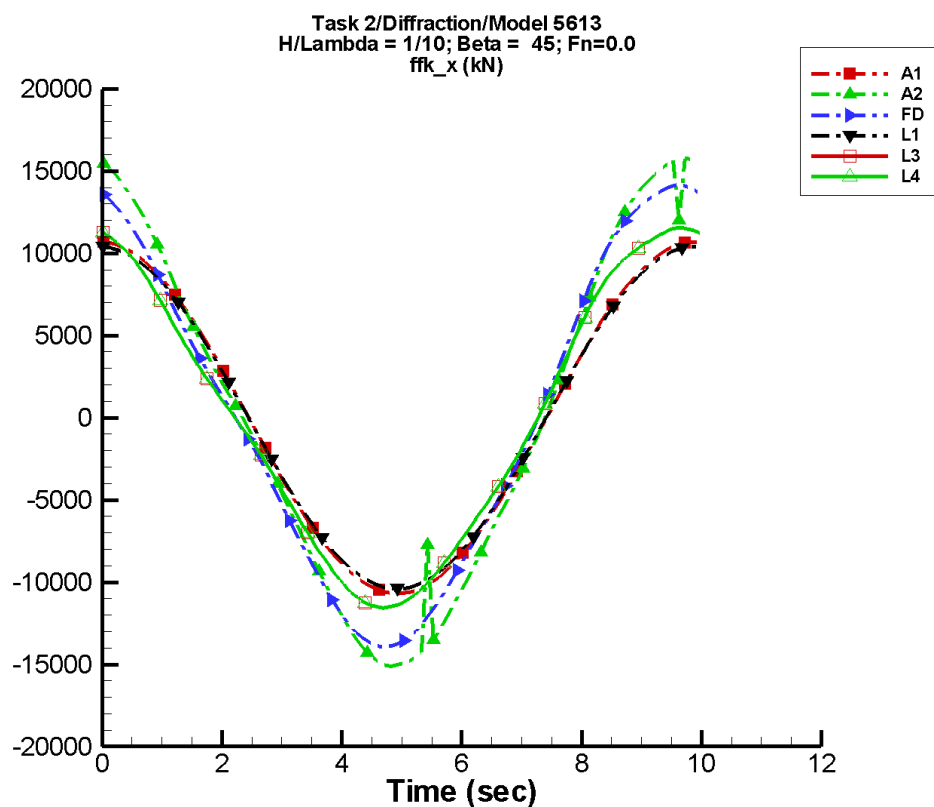
Table G–1355. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	6.75E-05	0.110	146	1.07E-04	135
A2	-47.7	107.	-166	136.	120
FD	-4.26E-04	6.02E-03	78	2.27E-03	46
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-6.83E-04	5.93E-04	-82	1.21E-03	-65

Table G–1356. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.110	0.110	-0.107	0.107
A2	-6.11E+03	1.95E-02	-814.	69.9
FD	-3.27E-02	3.02E-02	-8.18E-03	7.12E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.32E-02	1.82E-02	-4.04E-03	3.69E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–679. Time history of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
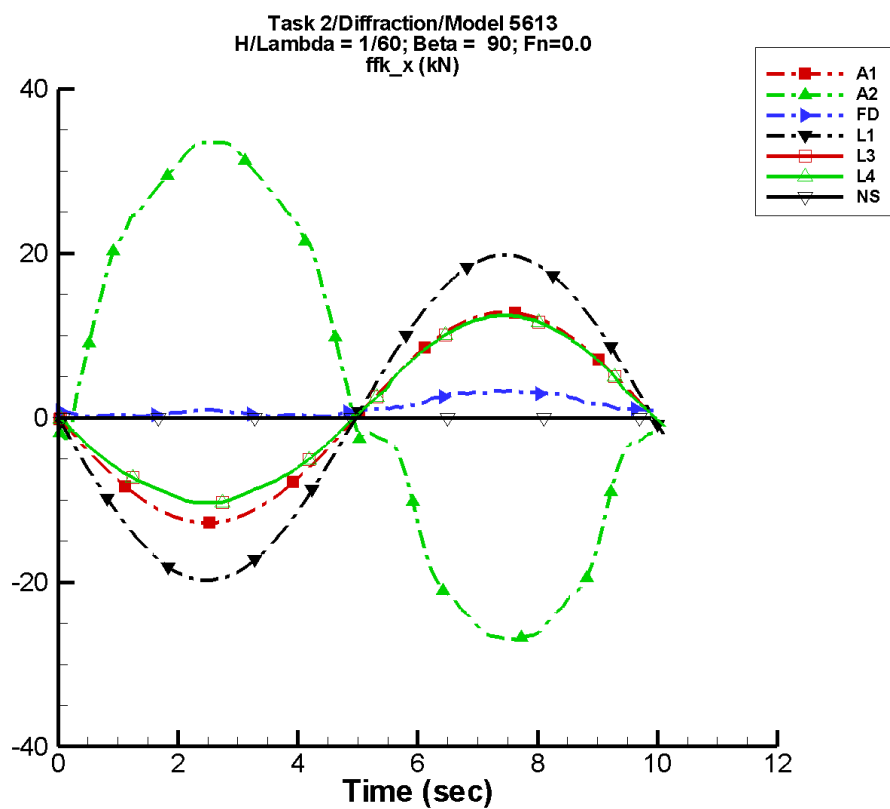
Table G–1357. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	9.01E-05	0.147	146	1.42E-04	135
A2	-36.6	66.3	-74	67.8	-47
FD	2.40E-03	5.75E-03	20	5.95E-03	137
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	6.63E-05	1.59E-03	-93	1.33E-03	89

Table G–1358. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.147	0.147	-0.143	0.142
A2	-1.92E+03	2.59E-02	-256.	21.8
FD	-4.71E-02	8.35E-02	-7.98E-03	1.93E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-3.91E-02	3.39E-02	-1.54E-02	5.80E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 180; Fn=0.3
ffk_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–680. Time history of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

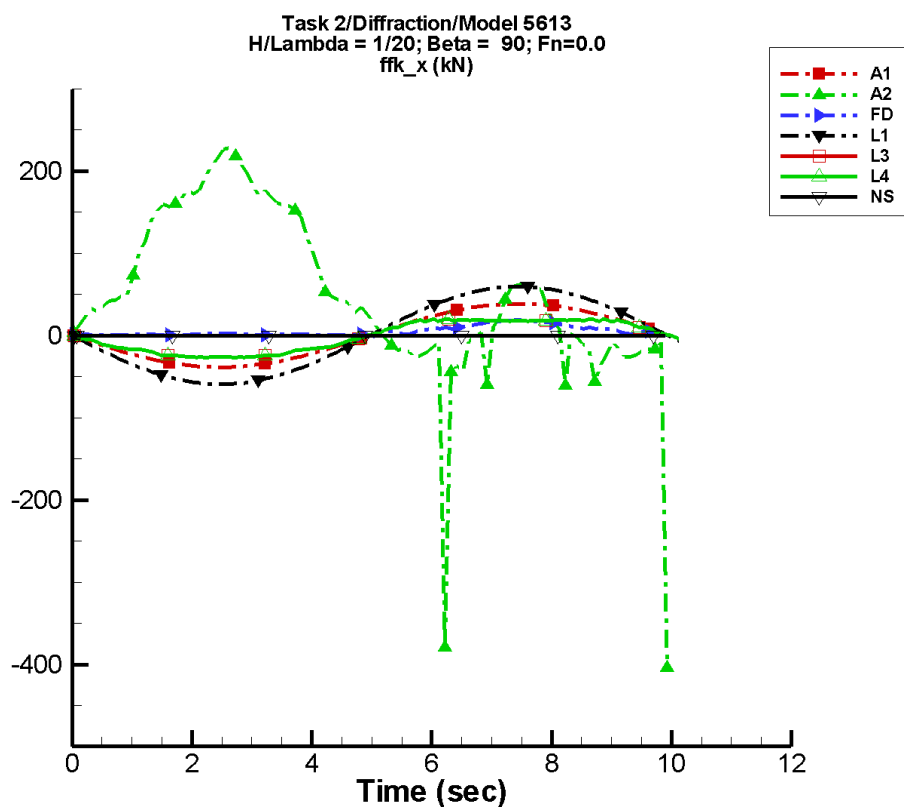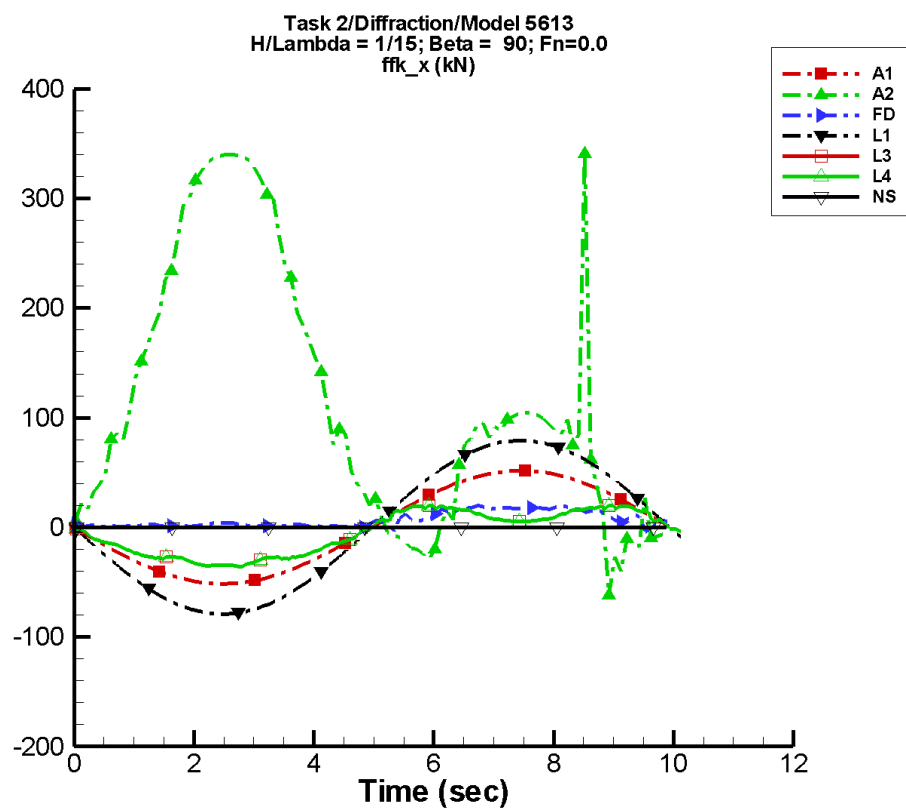Table G–1359. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.35E-04	0.220	146	2.14E-04	135
A2	6.36	42.5	-167	65.6	-24
FD	-6.86E-03	2.37E-02	-87	3.64E-02	-83
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1360. Minimum and maximum of of M_x^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.221	0.221	-0.214	0.214
A2	-1.11E+03	1.59E+03	-161.	221.
FD	-0.271	0.184	-0.129	6.84E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–681. Time history of M_y^{fk} for one period for $H/\lambda = 1/60, \lambda/L = 1, \beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
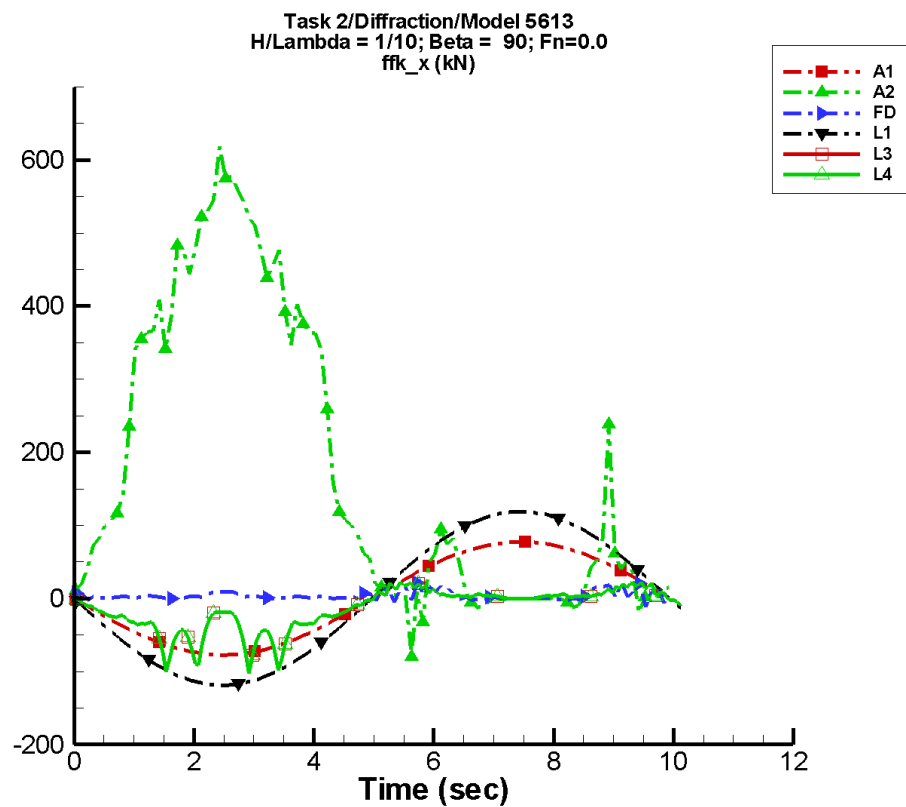
Table G–1361. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-382.	6.26E+05	101	588.	36
A2	3.62E+04	5.67E+05	96	4.04E+04	-152
FD	3.81E+04	5.65E+05	93	3.77E+04	-150
L1	-604.	6.24E+05	101	508.	122
L3	3.22E+04	5.59E+05	96	3.51E+04	-138
L4	3.22E+04	5.59E+05	96	3.51E+04	-138
NF	—	—	—	—	—
NS	831.	5.30E+05	91	6.11E+03	165

Table G–1362. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-6.26E+05	6.26E+05	-6.20E+05	6.20E+05
A2	-5.72E+05	6.00E+05	-5.60E+05	5.95E+05
FD	-5.67E+05	6.02E+05	-5.55E+05	5.95E+05
L1	-6.25E+05	6.25E+05	-6.22E+05	6.22E+05
L3	-5.72E+05	5.90E+05	-5.67E+05	5.87E+05
L4	-5.72E+05	5.90E+05	-5.67E+05	5.87E+05
NF	—	—	—	—
NS	-5.30E+05	5.33E+05	-5.24E+05	5.32E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–682. Time history of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
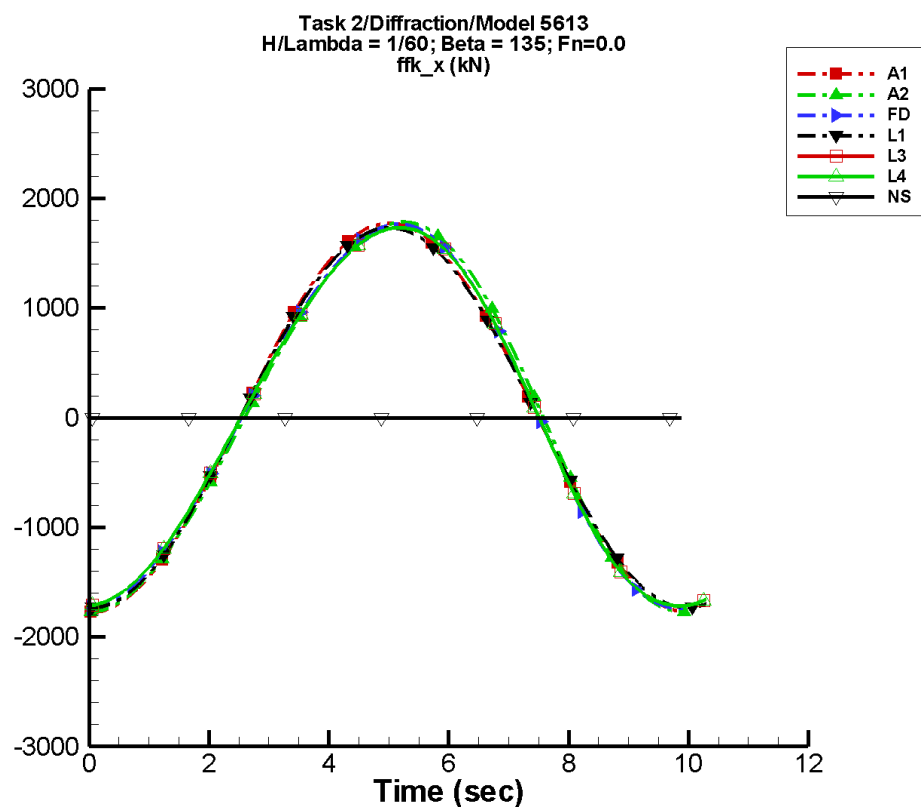
Table G–1363. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-1.15E+03	1.88E+06	101	1.77E+03	36
A2	2.55E+05	1.33E+06	89	1.69E+05	161
FD	2.51E+05	1.35E+06	90	1.85E+05	167
L1	-1.81E+03	1.87E+06	101	1.52E+03	122
L3	2.20E+05	1.26E+06	92	1.64E+05	174
L4	2.20E+05	1.26E+06	92	1.64E+05	174
NF	—	—	—	—	—
NS	1.12E+05	1.21E+06	88	1.42E+05	148

Table G–1364. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
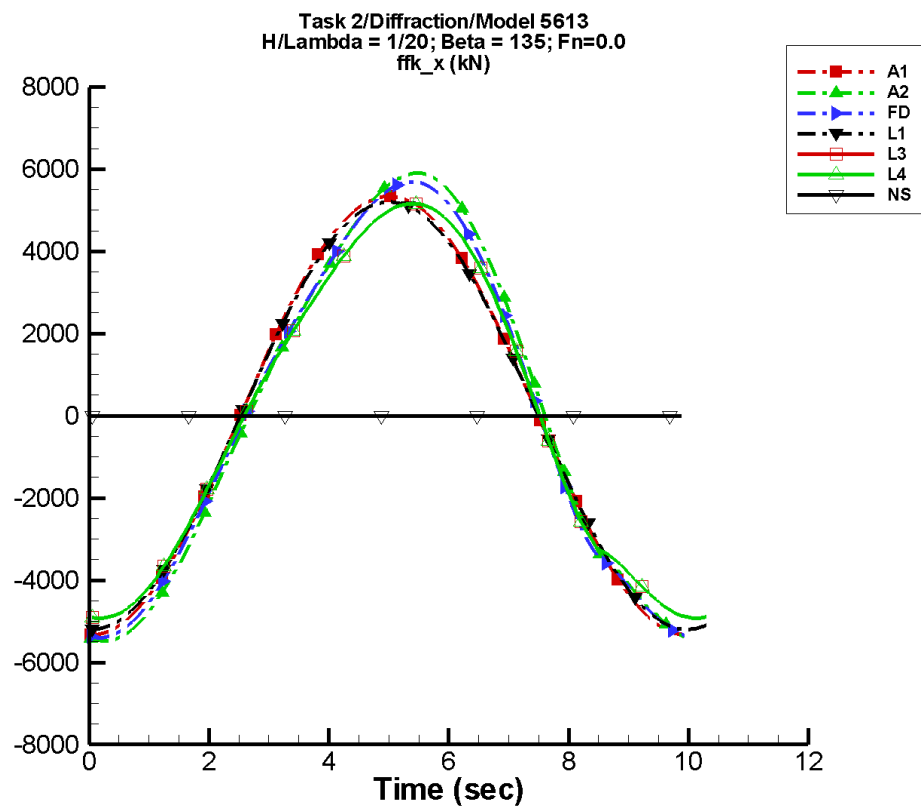
Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.88E+06	1.88E+06	-1.86E+06	1.86E+06
A2	-1.18E+06	1.66E+06	-1.10E+06	1.65E+06
FD	-1.23E+06	1.67E+06	-1.14E+06	1.65E+06
L1	-1.87E+06	1.87E+06	-1.87E+06	1.87E+06
L3	-1.17E+06	1.53E+06	-1.14E+06	1.52E+06
L4	-1.17E+06	1.53E+06	-1.14E+06	1.52E+06
NF	—	—	—	—
NS	-1.18E+06	1.39E+06	-1.11E+06	1.38E+06

Data identically zero, insufficient, or not available from NFA.

Figure G–683. Time history of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
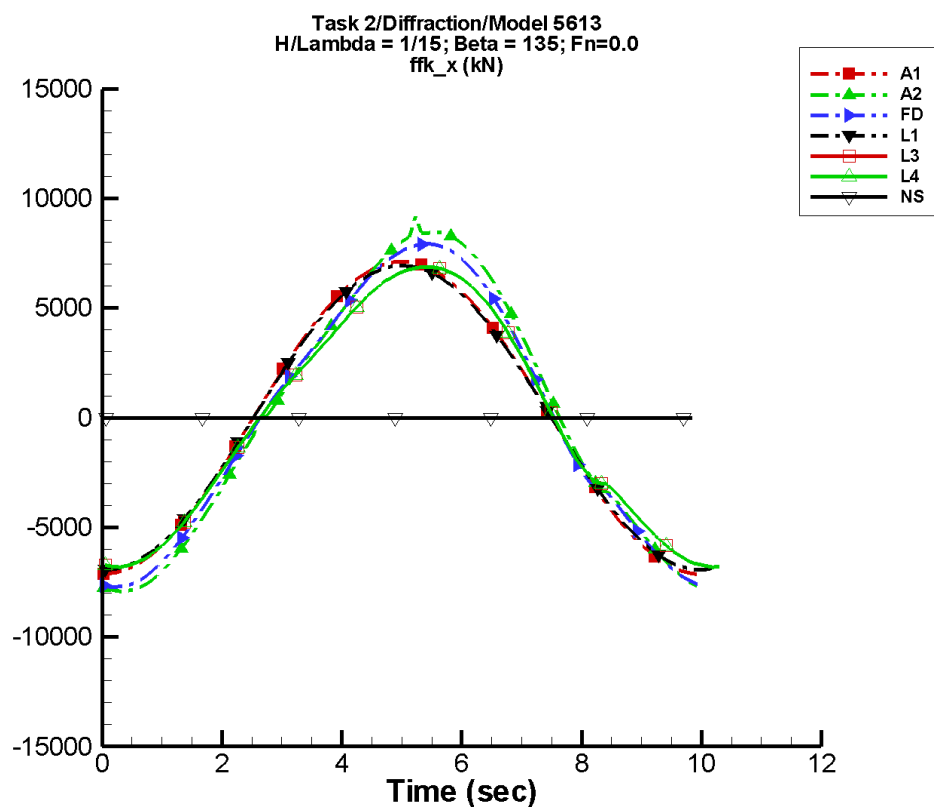
Table G–1365. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-1.53E+03	2.51E+06	101	2.36E+03	36
A2	3.91E+05	1.46E+06	92	1.69E+05	161
FD	3.74E+05	1.51E+06	92	1.80E+05	163
L1	-2.42E+03	2.50E+06	101	2.03E+03	122
L3	3.22E+05	1.31E+06	93	1.42E+05	169
L4	3.22E+05	1.31E+06	93	1.42E+05	169
NF	—	—	—	—	—
NS	1.11E+05	1.20E+06	84	1.00E+05	107

Table G–1366. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.51E+06	2.51E+06	-2.49E+06	2.49E+06
A2	-1.00E+06	1.96E+06	-9.80E+05	1.94E+06
FD	-1.05E+06	2.00E+06	-1.04E+06	1.98E+06
L1	-2.50E+06	2.50E+06	-2.49E+06	2.49E+06
L3	-9.20E+05	1.73E+06	-9.15E+05	1.73E+06
L4	-9.20E+05	1.73E+06	-9.15E+05	1.73E+06
NF	—	—	—	—
NS	-9.66E+05	1.38E+06	-9.54E+05	1.38E+06

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–684. Time history of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
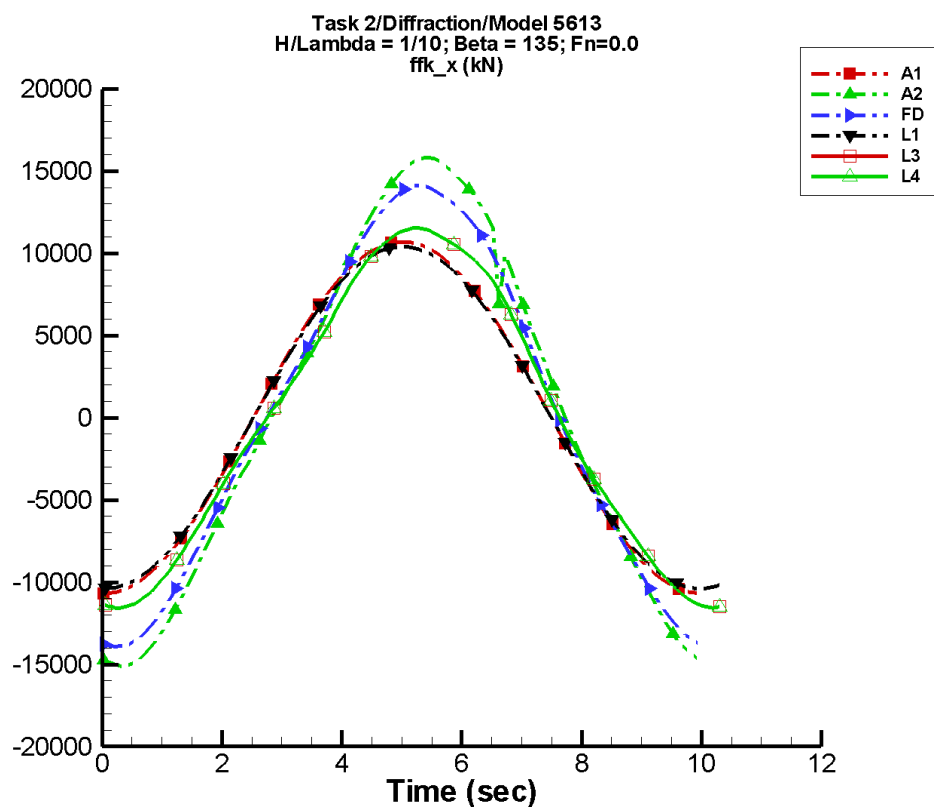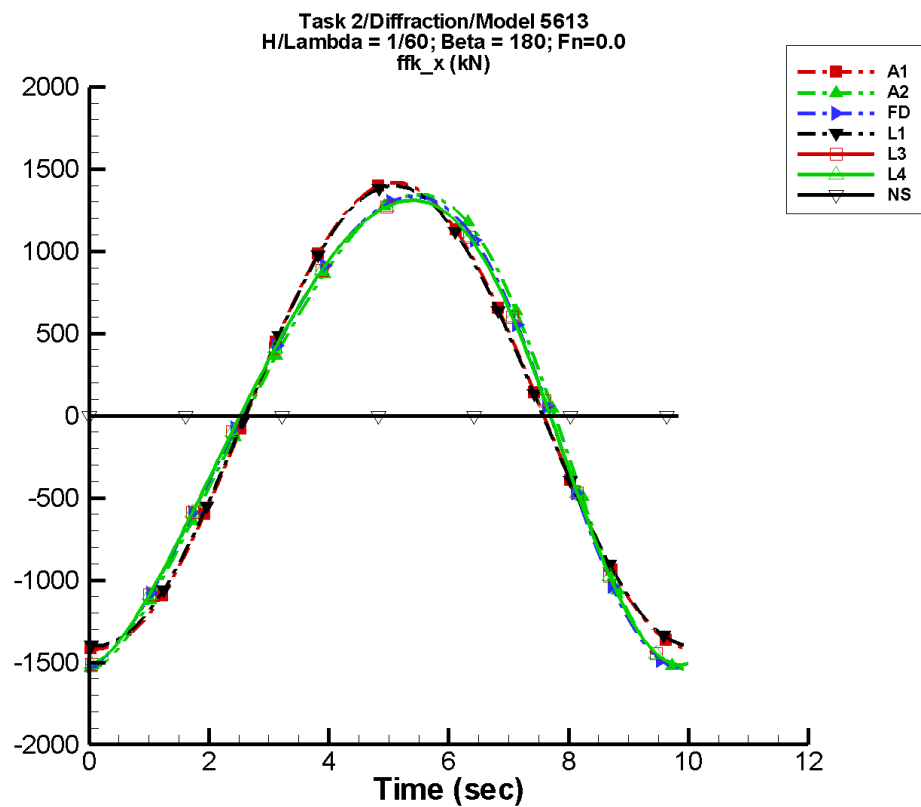
Table G–1367. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-2.30E+03	3.77E+06	101	3.54E+03	36
A2	1.56E+05	1.16E+06	82	3.14E+05	-15
FD	2.30E+05	1.28E+06	88	1.88E+05	-38
L1	-3.62E+03	3.75E+06	101	3.05E+03	122
L3	1.27E+05	8.95E+05	86	2.41E+05	-19
L4	1.27E+05	8.95E+05	86	2.41E+05	-19
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1368. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.77E+06	3.77E+06	-3.73E+06	3.73E+06
A2	-1.17E+06	1.68E+06	-1.12E+06	1.61E+06
FD	-1.19E+06	1.64E+06	-1.18E+06	1.59E+06
L1	-3.75E+06	3.75E+06	-3.73E+06	3.73E+06
L3	-9.14E+05	1.30E+06	-9.05E+05	1.22E+06
L4	-9.14E+05	1.30E+06	-9.05E+05	1.22E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–685. Time history of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1369. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
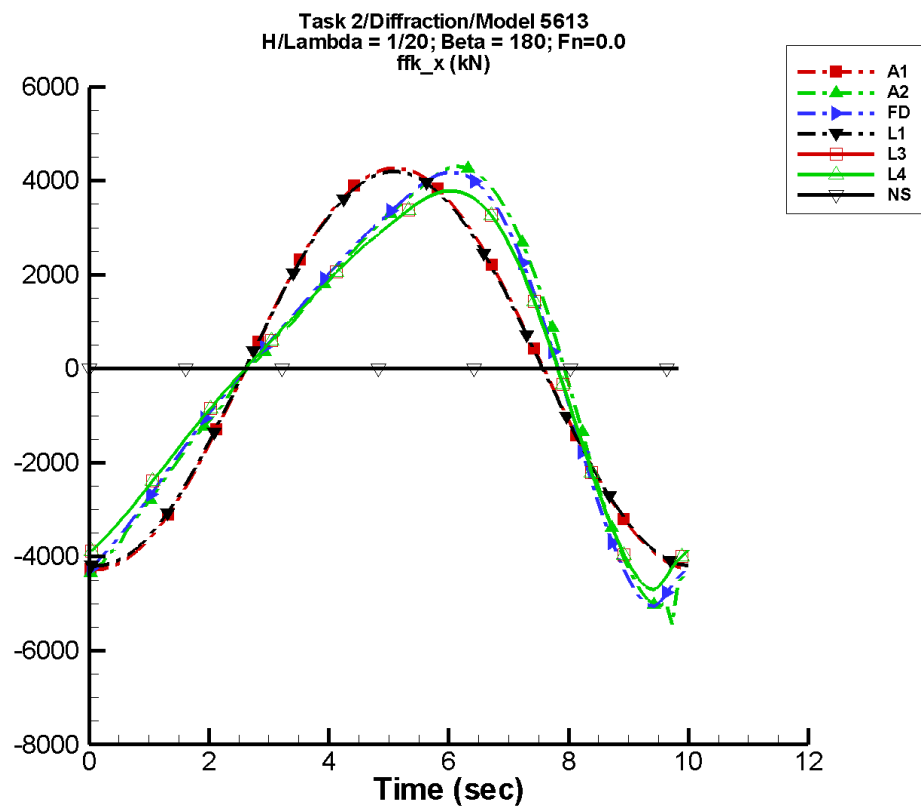
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-550.	7.12E+05	88	776.	26
A2	3.66E+04	6.20E+05	82	3.36E+04	117
FD	3.83E+04	6.18E+05	83	3.54E+04	114
L1	-278.	7.09E+05	89	479.	163
L3	3.24E+04	6.11E+05	86	3.82E+04	130
L4	3.24E+04	6.11E+05	86	3.82E+04	130
NF	—	—	—	—	—
NS	547.	5.45E+05	85	3.76E+03	59

Table G–1370. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-7.11E+05	7.11E+05	-7.04E+05	7.09E+05
A2	-5.52E+05	6.76E+05	-5.48E+05	6.77E+05
FD	-5.44E+05	6.74E+05	-5.40E+05	6.70E+05
L1	-7.09E+05	7.09E+05	-7.06E+05	7.08E+05
L3	-5.47E+05	6.59E+05	-5.45E+05	6.58E+05
L4	-5.47E+05	6.59E+05	-5.45E+05	6.58E+05
NF	—	—	—	—
NS	-5.37E+05	5.47E+05	-5.32E+05	5.49E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–686. Time history of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
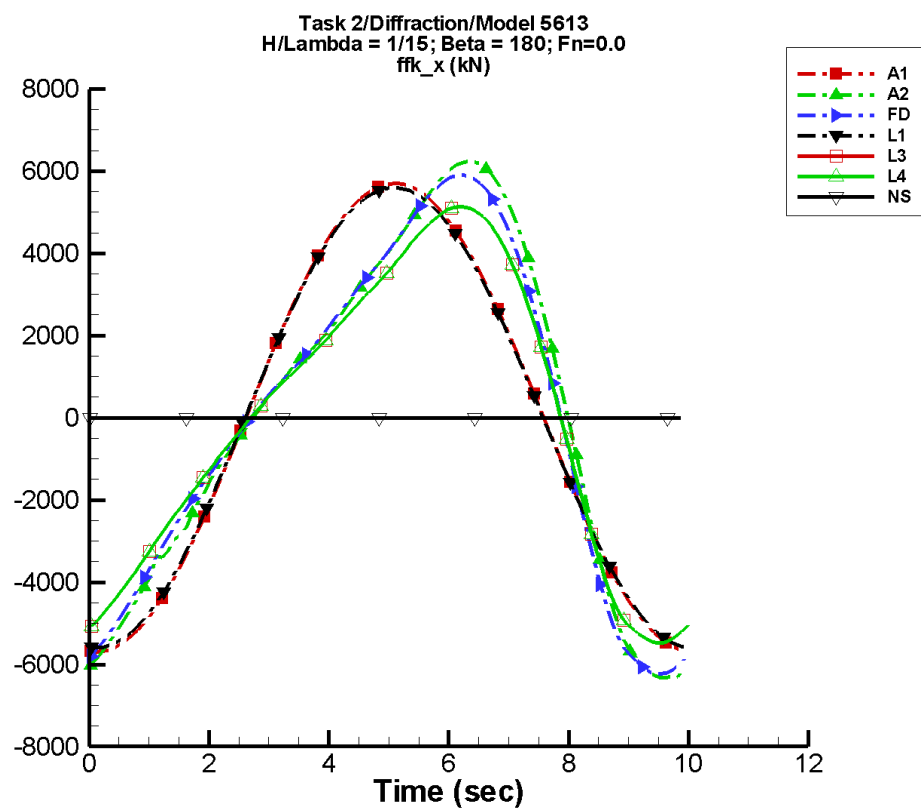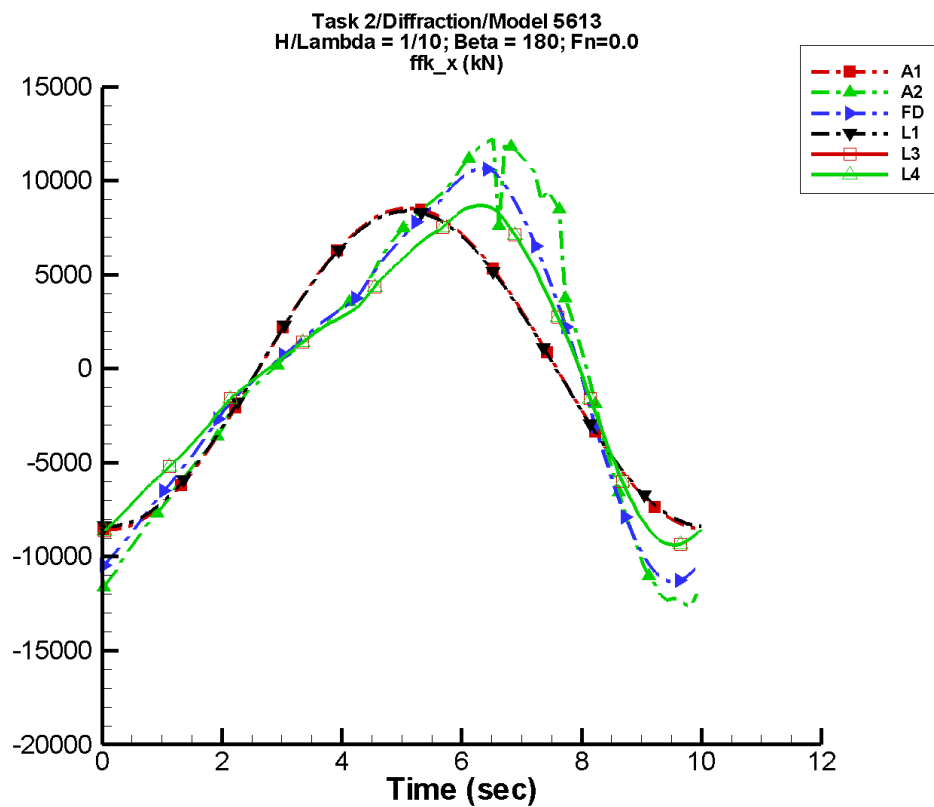
Table G–1371. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-1.65E+03	2.14E+06	88	2.33E+03	26
A2	2.53E+05	1.41E+06	81	1.78E+05	69
FD	2.44E+05	1.43E+06	83	1.92E+05	80
L1	-833.	2.13E+06	89	1.44E+03	163
L3	2.15E+05	1.32E+06	86	1.74E+05	94
L4	2.15E+05	1.32E+06	86	1.74E+05	94
NF	—	—	—	—	—
NS	1.07E+05	1.22E+06	85	1.32E+05	58

Table G–1372. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.14E+06	2.14E+06	-2.12E+06	2.13E+06
A2	-9.76E+05	1.80E+06	-9.63E+05	1.80E+06
FD	-9.89E+05	1.81E+06	-9.79E+05	1.80E+06
L1	-2.13E+06	2.13E+06	-2.12E+06	2.12E+06
L3	-9.09E+05	1.63E+06	-9.07E+05	1.63E+06
L4	-9.09E+05	1.63E+06	-9.07E+05	1.63E+06
NF	—	—	—	—
NS	-1.00E+06	1.40E+06	-9.84E+05	1.41E+06

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 45; Fn=0.0
ffk_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–687. Time history of M_y^{ffk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
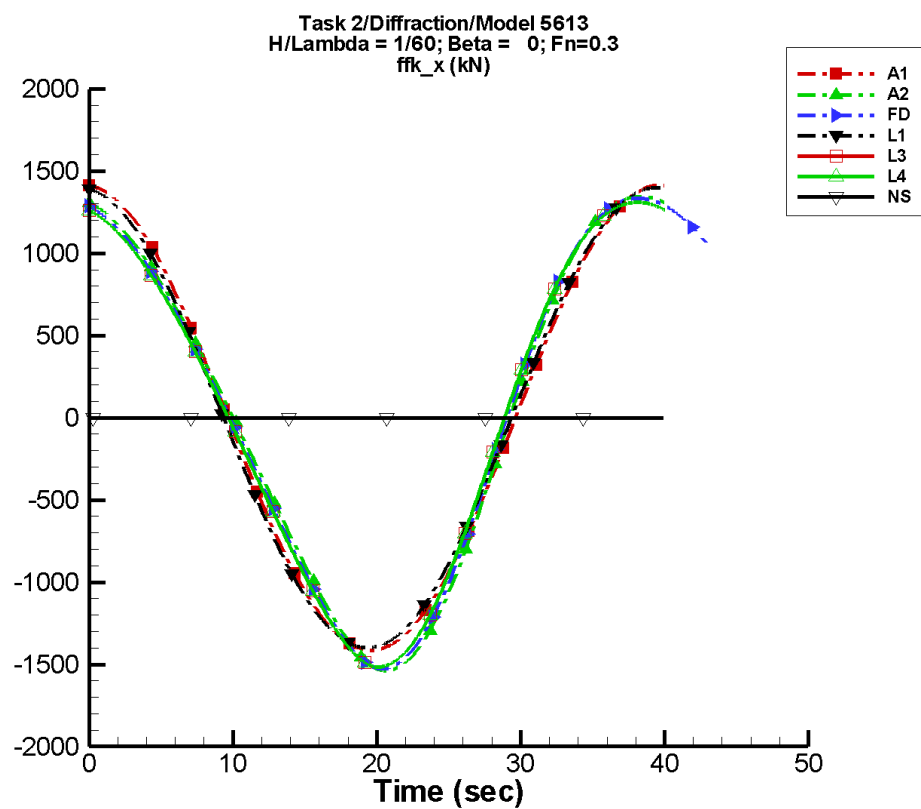
Table G–1373. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-2.21E+03	2.86E+06	88	3.12E+03	26
A2	3.92E+05	1.58E+06	83	2.76E+05	40
FD	3.70E+05	1.64E+06	84	2.68E+05	44
L1	-1.11E+03	2.83E+06	89	1.91E+03	163
L3	3.25E+05	1.42E+06	88	2.13E+05	49
L4	3.25E+05	1.42E+06	88	2.13E+05	49
NF	—	—	—	—	—
NS	1.09E+05	1.19E+06	86	2.45E+05	11

Table G–1374. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.86E+06	2.86E+06	-2.83E+06	2.85E+06
A2	-1.06E+06	2.15E+06	-1.03E+06	2.13E+06
FD	-1.13E+06	2.18E+06	-1.12E+06	2.16E+06
L1	-2.83E+06	2.83E+06	-2.82E+06	2.83E+06
L3	-9.76E+05	1.86E+06	-9.73E+05	1.85E+06
L4	-9.76E+05	1.86E+06	-9.73E+05	1.85E+06
NF	—	—	—	—
NS	-1.12E+06	1.41E+06	-1.10E+06	1.40E+06

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–688. Time history of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

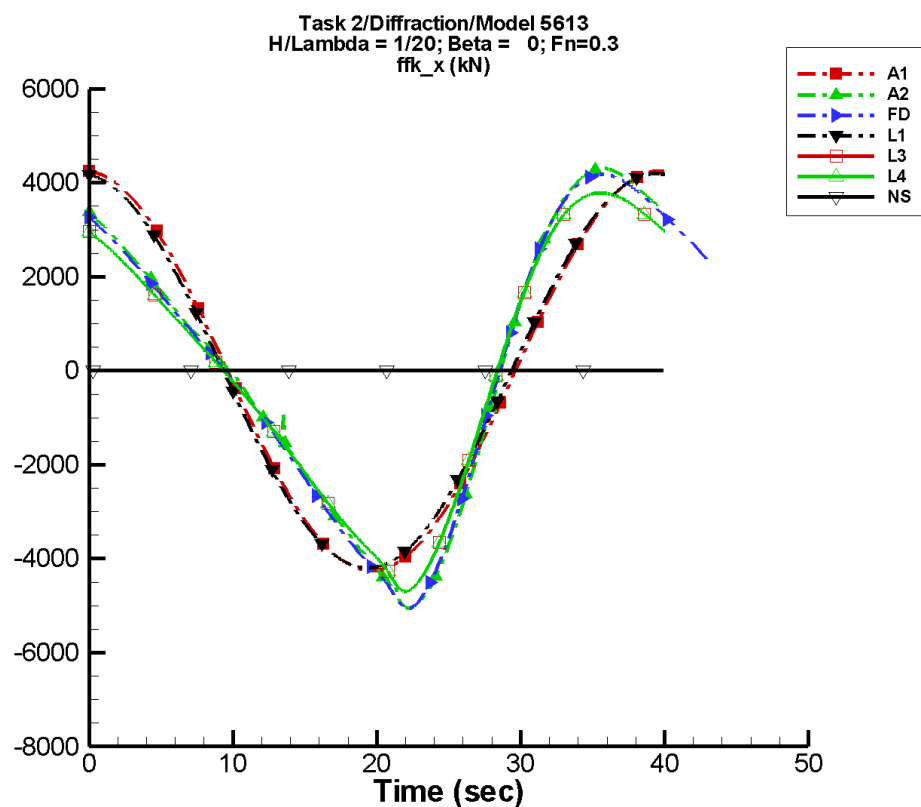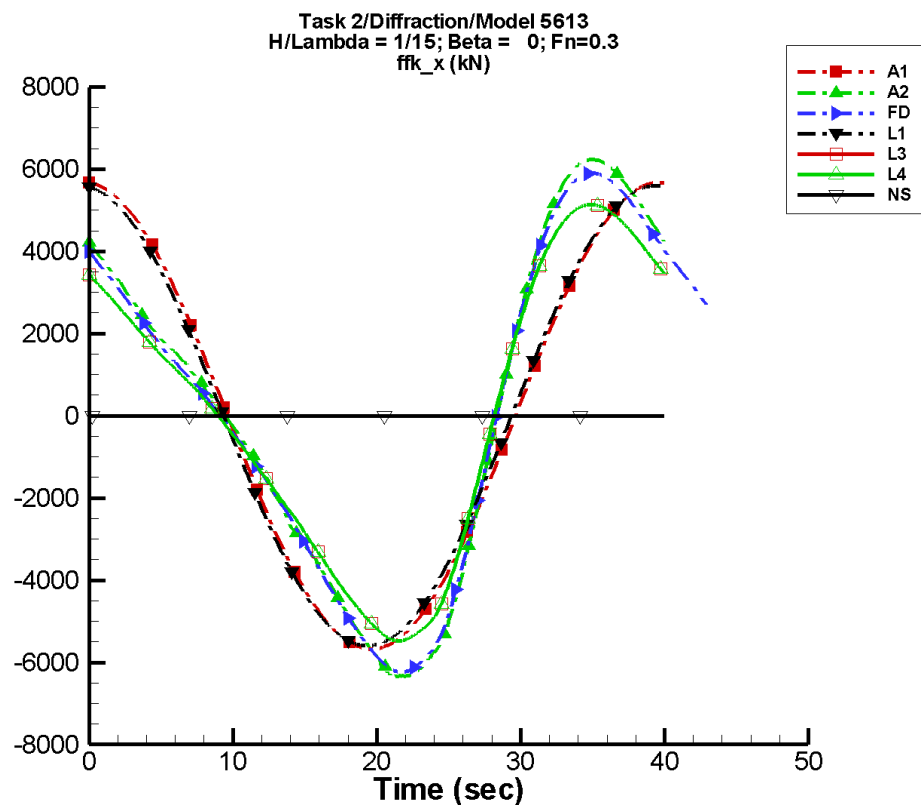Table G–1375. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-3.31E+03	4.29E+06	88	4.67E+03	26
A2	1.72E+05	1.16E+06	79	5.73E+05	-45
FD	2.06E+05	1.34E+06	83	4.63E+05	-32
L1	-1.67E+03	4.25E+06	89	2.87E+03	163
L3	1.13E+05	8.97E+05	85	4.34E+05	-37
L4	1.13E+05	8.97E+05	85	4.34E+05	-37
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1376. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-4.29E+06	4.28E+06	-4.24E+06	4.27E+06
A2	-1.27E+06	1.89E+06	-1.25E+06	1.81E+06
FD	-1.34E+06	1.89E+06	-1.32E+06	1.82E+06
L1	-4.25E+06	4.25E+06	-4.24E+06	4.25E+06
L3	-1.02E+06	1.45E+06	-1.01E+06	1.39E+06
L4	-1.02E+06	1.45E+06	-1.01E+06	1.39E+06
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.0
ffk_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–689. Time history of M_y^{ffk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
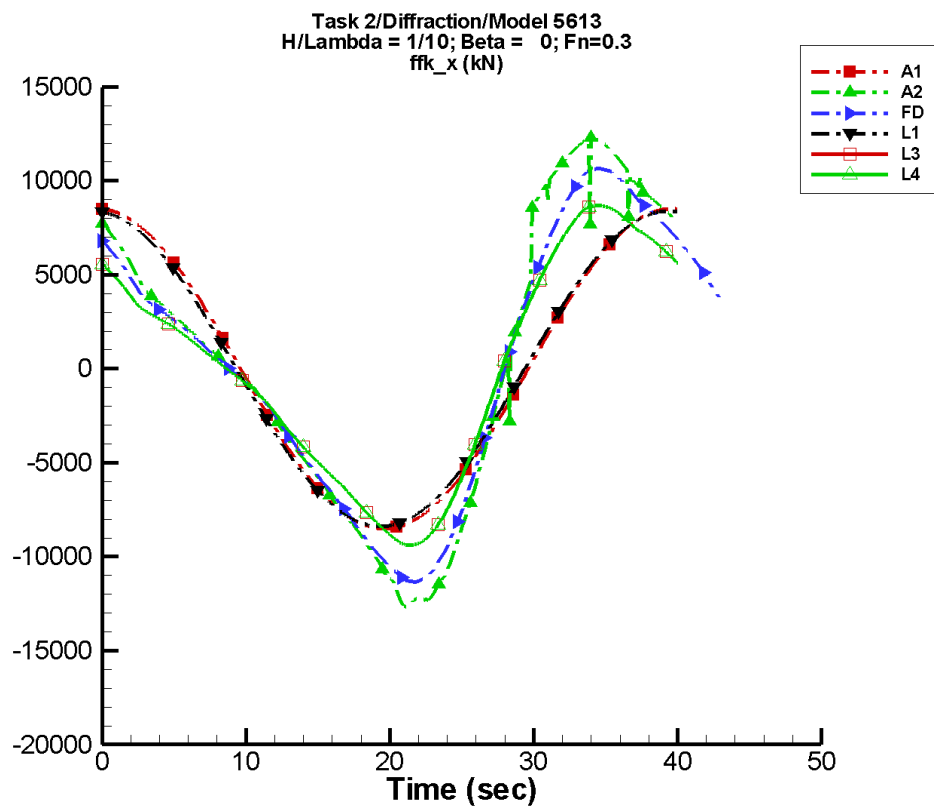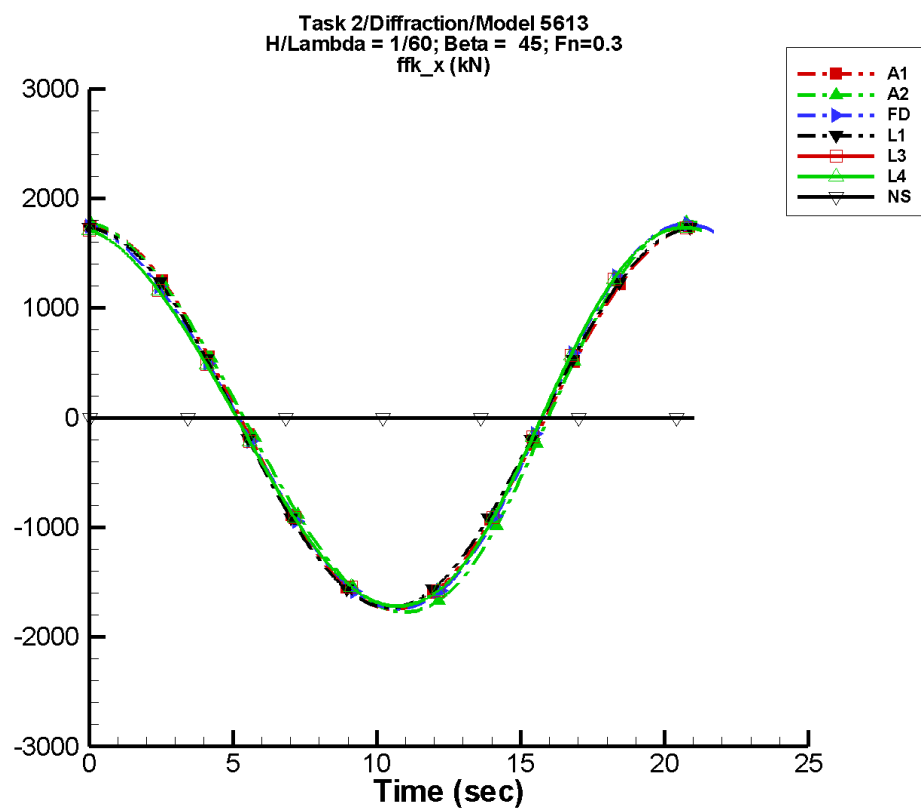
Table G–1377. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-147.	2.33E+05	-4	223.	-25
A2	3.70E+04	1.83E+05	-8	3.34E+04	-104
FD	3.89E+04	1.70E+05	-7	3.40E+04	-107
L1	-96.8	2.34E+05	-4	154.	-37
L3	3.29E+04	1.65E+05	-4	2.92E+04	-96
L4	3.29E+04	1.65E+05	-4	2.92E+04	-96
NF	—	—	—	—	—
NS	254.	8.97E+04	-2	2.53E+03	-94

Table G–1378. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.33E+05	2.33E+05	-2.30E+05	2.30E+05
A2	-1.05E+05	2.45E+05	-1.05E+05	2.43E+05
FD	-9.03E+04	2.34E+05	-9.01E+04	2.32E+05
L1	-2.34E+05	2.34E+05	-2.33E+05	2.33E+05
L3	-9.38E+04	2.20E+05	-9.37E+04	2.19E+05
L4	-9.38E+04	2.20E+05	-9.37E+04	2.19E+05
NF	—	—	—	—
NS	-8.66E+04	9.28E+04	-8.59E+04	9.20E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.0
ffk_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–690. Time history of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1379. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-442.	7.00E+05	-4	670.	-25
A2	2.56E+05	3.31E+05	-7	2.09E+05	-105
FD	2.51E+05	2.91E+05	-7	2.04E+05	-107
L1	-290.	7.03E+05	-4	462.	-37
L3	2.19E+05	2.28E+05	-2	1.75E+05	-96
L4	2.19E+05	2.28E+05	-2	1.75E+05	-96
NF	—	—	—	—	—
NS	1.01E+05	1.02E+05	4	1.21E+05	-98

Table G–1380. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

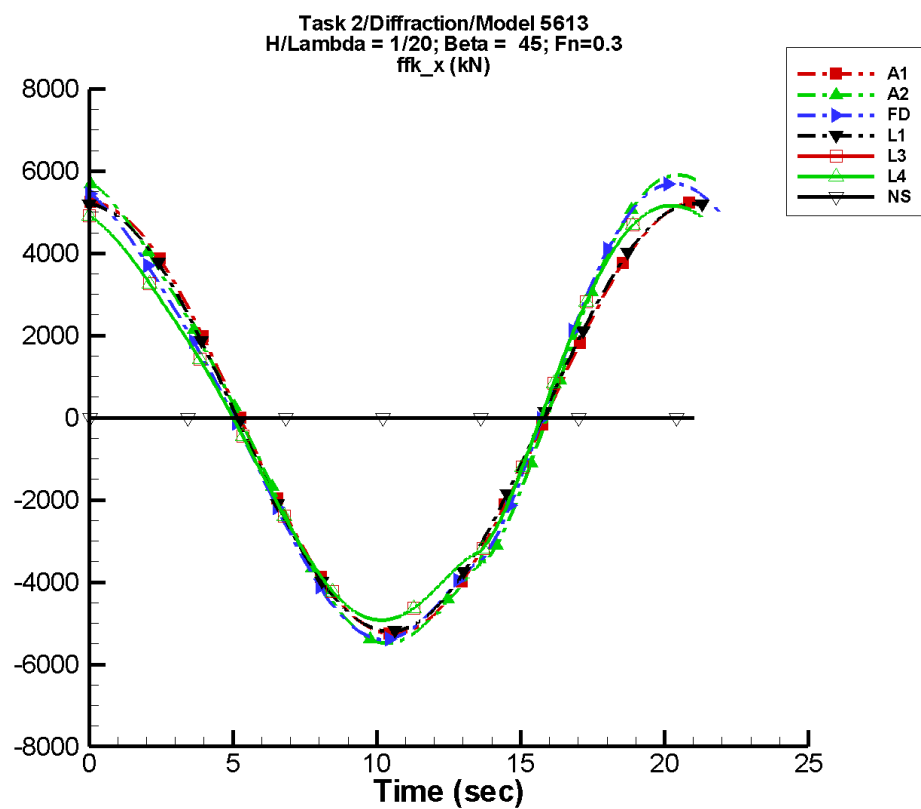| Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-7.00E+05	7.00E+05	-6.93E+05	6.92E+05
A2	-7.26E+04	7.60E+05	-5.76E+04	7.36E+05
FD	-6.25E+04	7.01E+05	-4.61E+04	6.94E+05
L1	-7.02E+05	7.02E+05	-7.00E+05	7.00E+05
L3	-6.40E+04	5.78E+05	-5.72E+04	5.77E+05
L4	-6.40E+04	5.78E+05	-5.72E+04	5.77E+05
NF	—	—	—	—
NS	-7.97E+04	2.99E+05	-6.80E+04	2.95E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.0
ffk_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–691. Time history of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
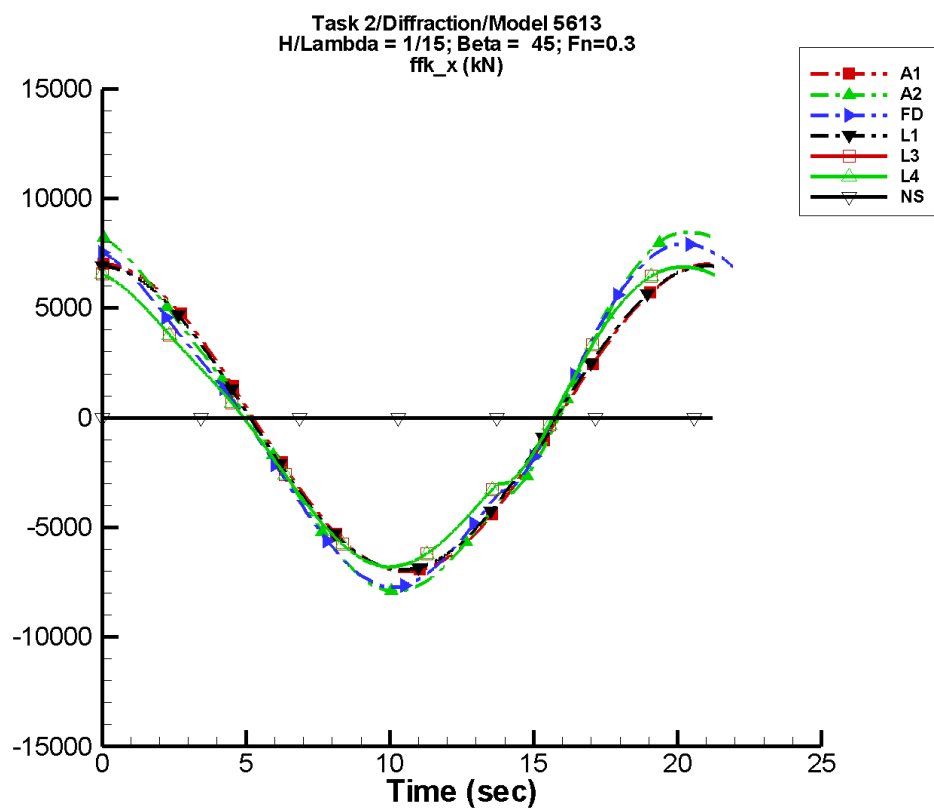
Table G–1381. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-591.	9.34E+05	-4	895.	-25
A2	3.96E+05	3.95E+05	-7	3.18E+05	-105
FD	3.79E+05	3.18E+05	-7	2.95E+05	-106
L1	-387.	9.37E+05	-4	616.	-37
L3	3.25E+05	2.10E+05	-2	2.44E+05	-96
L4	3.25E+05	2.10E+05	-2	2.44E+05	-96
NF	—	—	—	—	—
NS	1.08E+05	7.99E+04	171	1.23E+05	-98

Table G–1382. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-9.34E+05	9.34E+05	-9.25E+05	9.25E+05
A2	-4.19E+04	1.05E+06	-1.89E+04	1.04E+06
FD	-3.65E+04	9.31E+05	-1.11E+04	9.22E+05
L1	-9.37E+05	9.37E+05	-9.33E+05	9.33E+05
L3	-3.64E+04	7.18E+05	-2.68E+04	7.16E+05
L4	-3.64E+04	7.18E+05	-2.68E+04	7.16E+05
NF	—	—	—	—
NS	-9.90E+03	3.30E+05	-627.	3.28E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–692. Time history of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
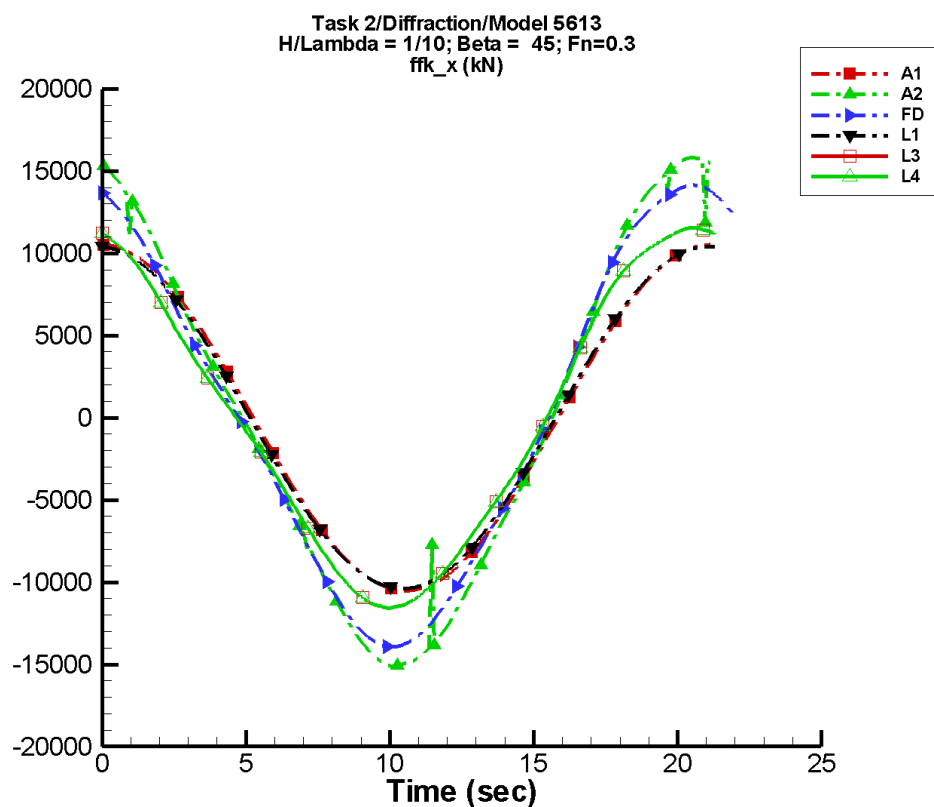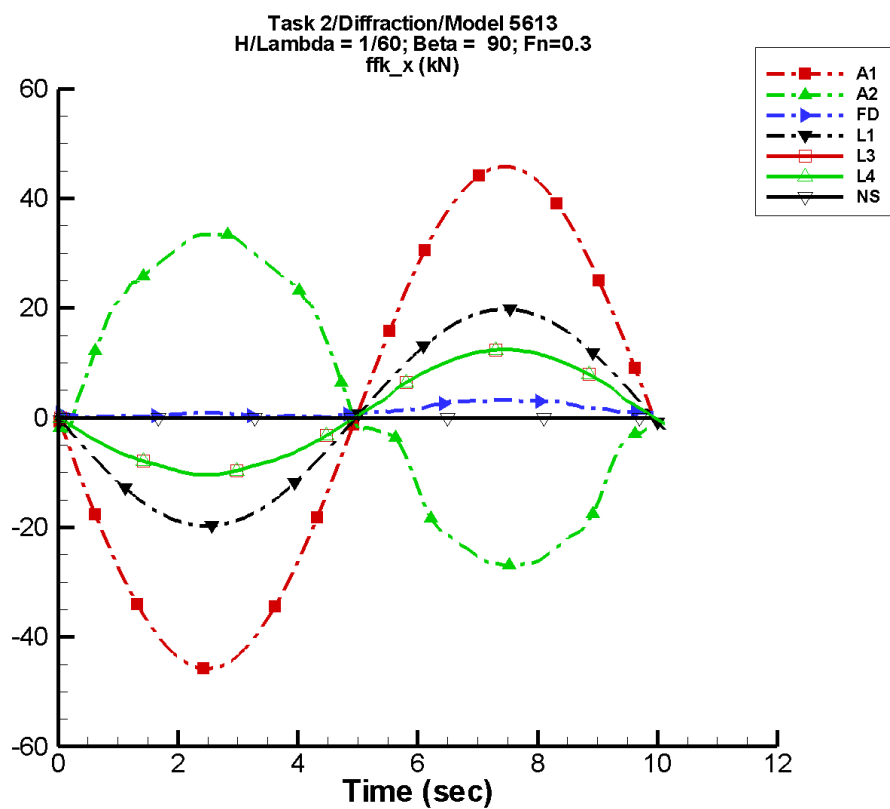
Table G–1383. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-886.	1.40E+06	-4	1.34E+03	-25
A2	1.91E+05	8.13E+04	15	2.72E+05	58
FD	2.27E+05	1.09E+05	5	2.03E+05	77
L1	-581.	1.41E+06	-4	924.	-37
L3	1.02E+05	1.00E+05	156	3.34E+05	69
L4	1.02E+05	1.00E+05	156	3.34E+05	69
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1384. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.40E+06	1.40E+06	-1.39E+06	1.39E+06
A2	-1.08E+06	1.07E+06	-9.59E+05	9.15E+05
FD	-6.39E+05	1.01E+06	-5.54E+05	8.56E+05
L1	-1.40E+06	1.40E+06	-1.40E+06	1.40E+06
L3	-9.36E+05	8.25E+05	-9.75E+05	7.27E+05
L4	-9.36E+05	8.25E+05	-9.75E+05	7.27E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.0
ffk_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–693. Time history of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
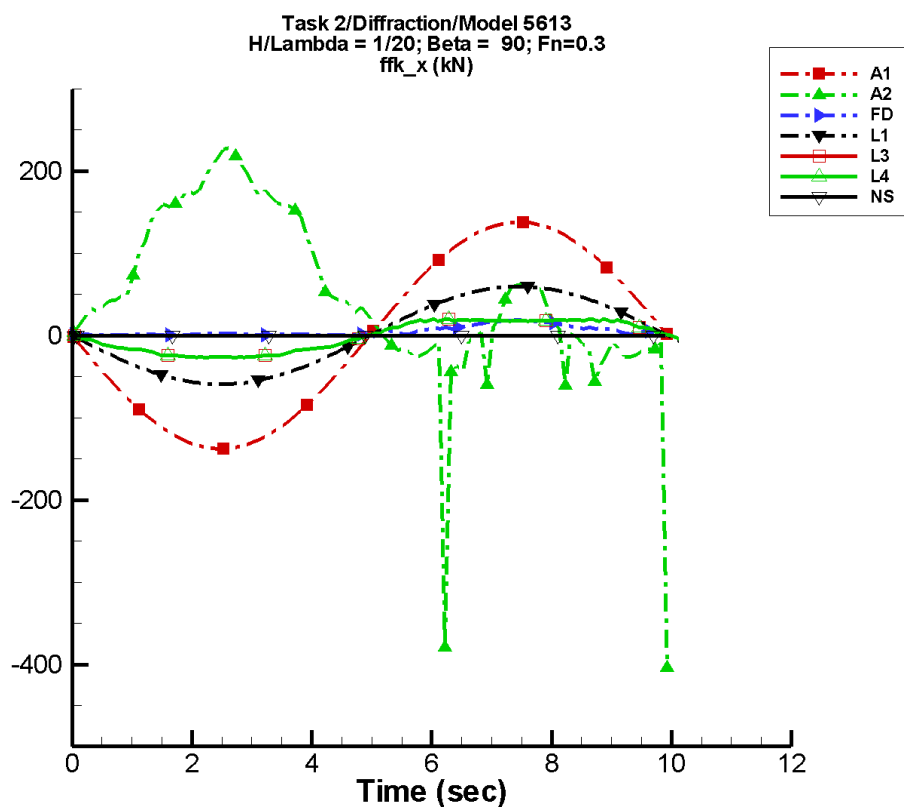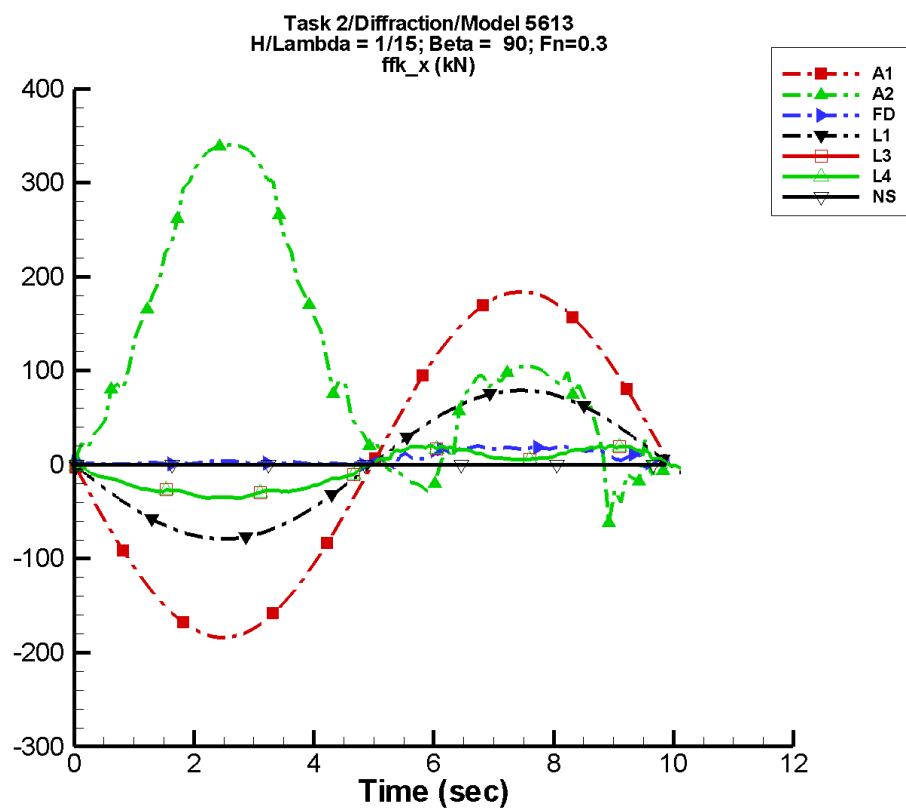
Table G–1385. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	591.	7.11E+05	-97	817.	-157
A2	3.77E+04	6.18E+05	-98	3.50E+04	32
FD	3.93E+04	6.16E+05	-99	3.23E+04	36
L1	747.	7.08E+05	-97	505.	-103
L3	3.34E+04	6.10E+05	-95	3.53E+04	29
L4	3.34E+04	6.10E+05	-95	3.53E+04	29
NF	—	—	—	—	—
NS	663.	5.45E+05	-89	4.67E+03	106

Table G–1386. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-7.11E+05	7.11E+05	-7.13E+05	7.04E+05
A2	-5.52E+05	6.76E+05	-5.49E+05	6.69E+05
FD	-5.44E+05	6.75E+05	-5.40E+05	6.68E+05
L1	-7.09E+05	7.09E+05	-7.08E+05	7.06E+05
L3	-5.47E+05	6.59E+05	-5.45E+05	6.57E+05
L4	-5.47E+05	6.59E+05	-5.45E+05	6.57E+05
NF	—	—	—	—
NS	-5.37E+05	5.47E+05	-5.36E+05	5.41E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–694. Time history of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
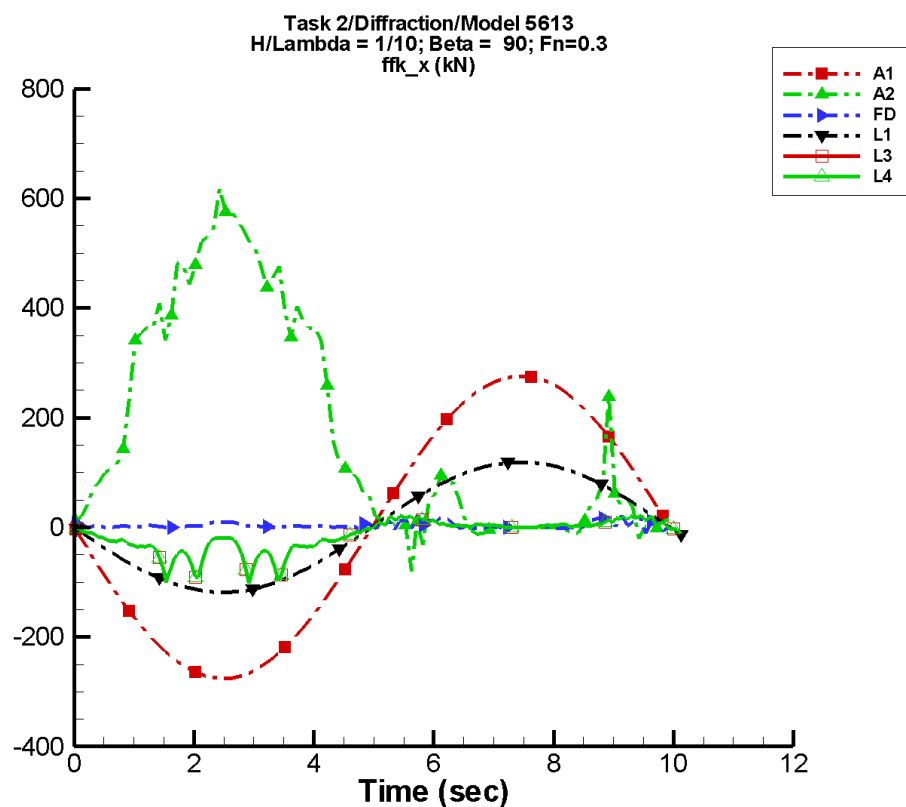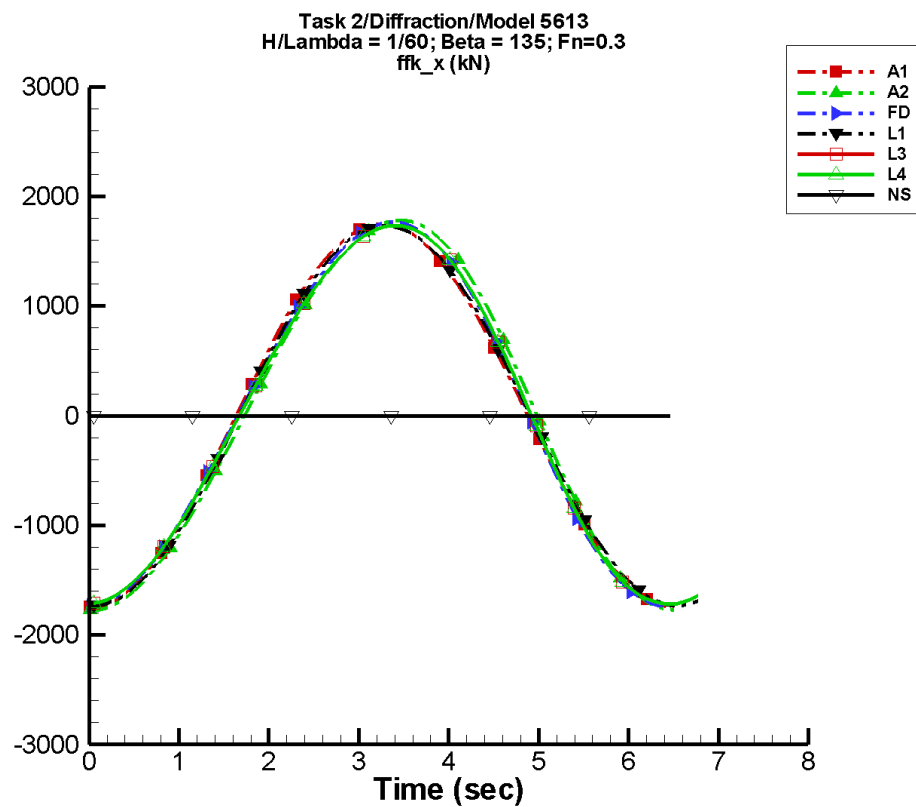
Table G–1387. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.78E+03	2.14E+06	-97	2.46E+03	-157
A2	2.54E+05	1.42E+06	-98	1.82E+05	80
FD	2.50E+05	1.44E+06	-99	1.71E+05	67
L1	2.24E+03	2.12E+06	-97	1.52E+03	-103
L3	2.19E+05	1.33E+06	-95	1.66E+05	65
L4	2.19E+05	1.33E+06	-95	1.66E+05	65
NF	—	—	—	—	—
NS	1.03E+05	1.22E+06	-89	1.45E+05	106

Table G–1388. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.14E+06	2.14E+06	-2.14E+06	2.12E+06
A2	-9.76E+05	1.79E+06	-9.62E+05	1.77E+06
FD	-9.89E+05	1.81E+06	-9.85E+05	1.79E+06
L1	-2.13E+06	2.13E+06	-2.12E+06	2.12E+06
L3	-9.09E+05	1.63E+06	-9.07E+05	1.63E+06
L4	-9.09E+05	1.63E+06	-9.07E+05	1.63E+06
NF	—	—	—	—
NS	-9.86E+05	1.40E+06	-9.63E+05	1.39E+06

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.0
ffk_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–695. Time history of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1389. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.37E+03	2.86E+06	-97	3.28E+03	-157
A2	3.92E+05	1.59E+06	-99	2.79E+05	108
FD	3.76E+05	1.65E+06	-100	2.41E+05	104
L1	2.99E+03	2.83E+06	-97	2.02E+03	-103
L3	3.26E+05	1.43E+06	-96	2.04E+05	111
L4	3.26E+05	1.43E+06	-96	2.04E+05	111
NF	—	—	—	—	—
NS	1.08E+05	1.19E+06	-88	2.48E+05	154

Table G–1390. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
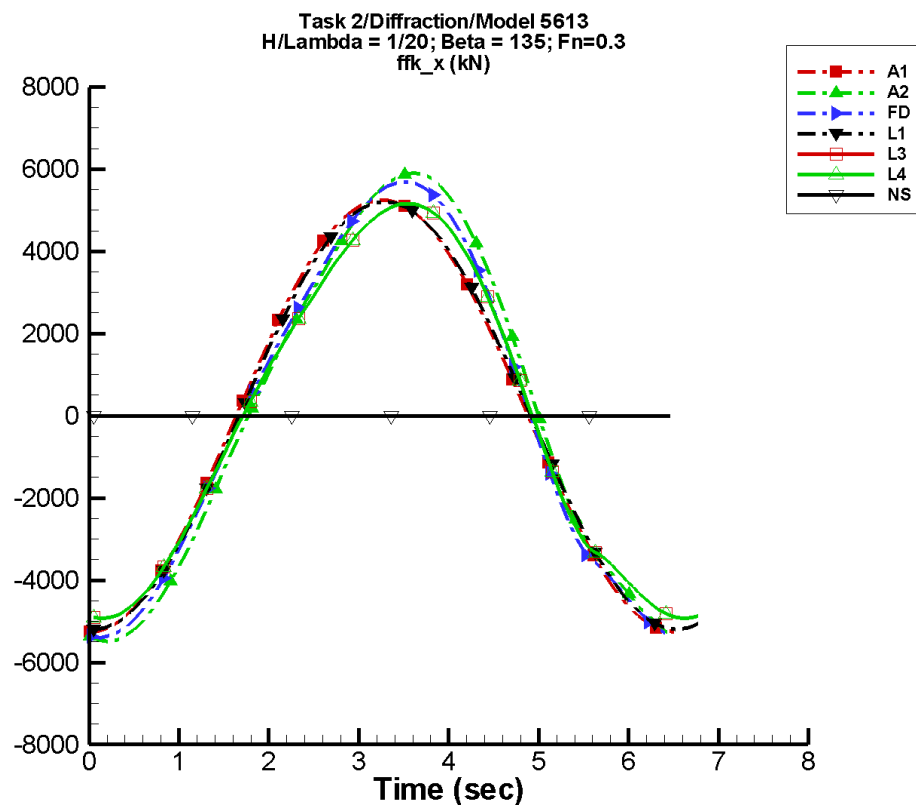
Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.86E+06	2.86E+06	-2.86E+06	2.83E+06
A2	-1.06E+06	2.15E+06	-1.04E+06	2.13E+06
FD	-1.13E+06	2.18E+06	-1.12E+06	2.15E+06
L1	-2.83E+06	2.83E+06	-2.83E+06	2.82E+06
L3	-9.76E+05	1.86E+06	-9.72E+05	1.85E+06
L4	-9.76E+05	1.86E+06	-9.72E+05	1.85E+06
NF	—	—	—	—
NS	-1.07E+06	1.43E+06	-1.06E+06	1.42E+06

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–696. Time history of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
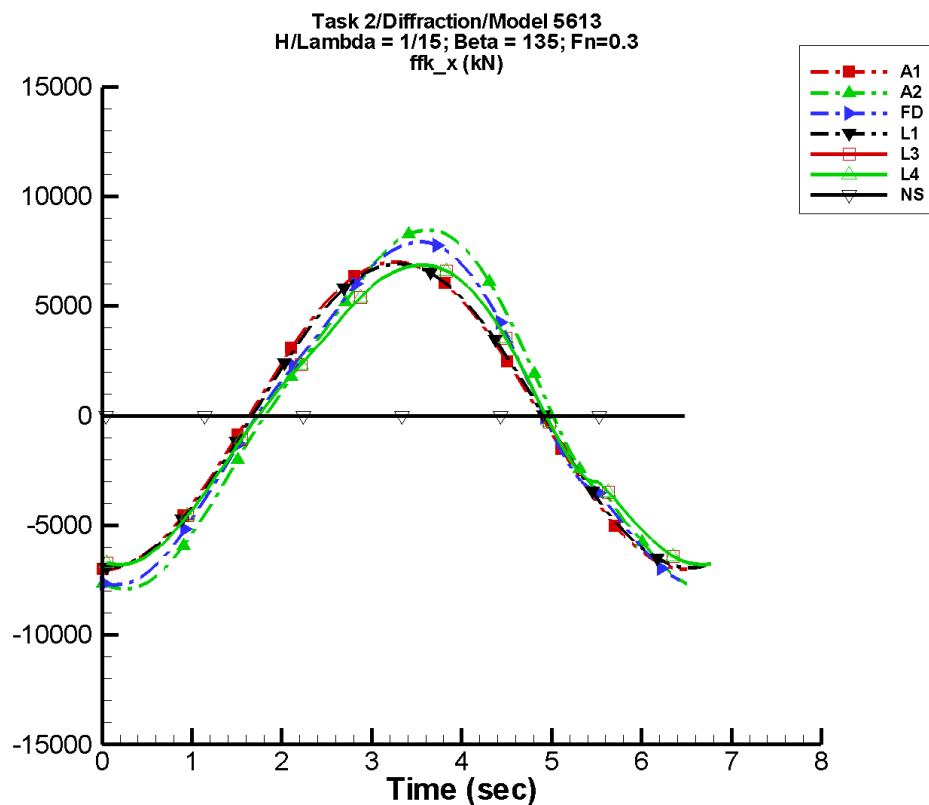
Table G–1391. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	3.56E+03	4.29E+06	-97	4.92E+03	-157
A2	1.53E+05	1.14E+06	-97	5.21E+05	-170
FD	2.25E+05	1.33E+06	-100	4.69E+05	-171
L1	4.48E+03	4.25E+06	-97	3.03E+03	-103
L3	1.16E+05	9.05E+05	-95	4.25E+05	-153
L4	1.16E+05	9.05E+05	-95	4.25E+05	-153
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1392. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.29E+06	4.29E+06	-4.30E+06	4.24E+06
A2	-1.27E+06	1.89E+06	-1.25E+06	1.80E+06
FD	-1.34E+06	1.88E+06	-1.32E+06	1.81E+06
L1	-4.25E+06	4.25E+06	-4.25E+06	4.24E+06
L3	-1.02E+06	1.46E+06	-1.01E+06	1.39E+06
L4	-1.02E+06	1.46E+06	-1.01E+06	1.39E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–697. Time history of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
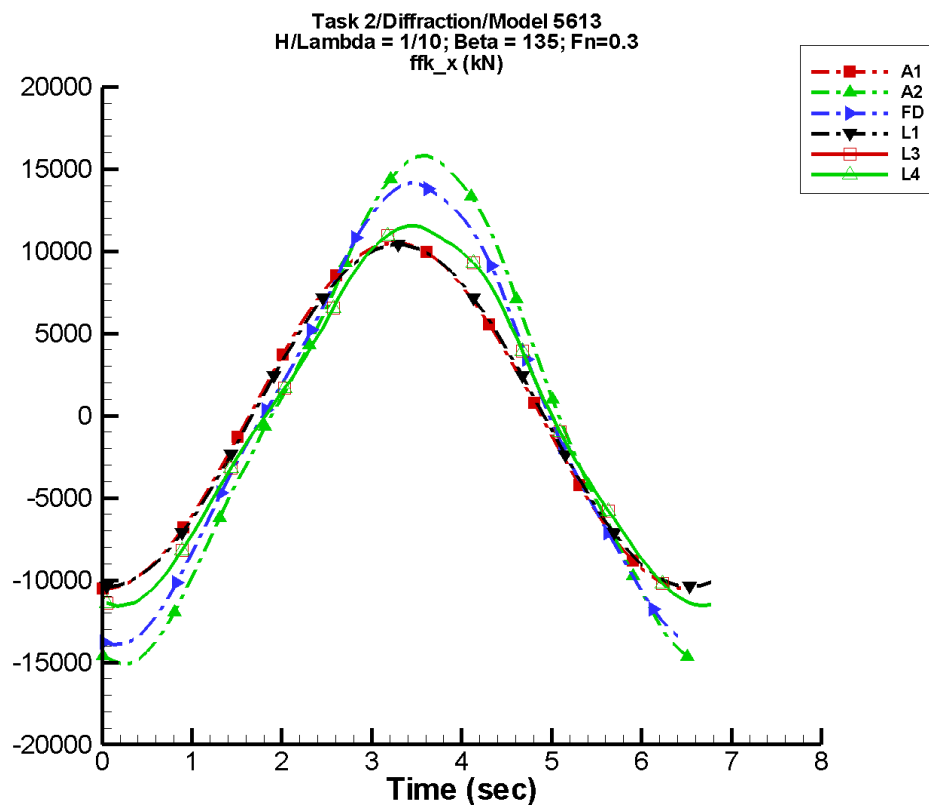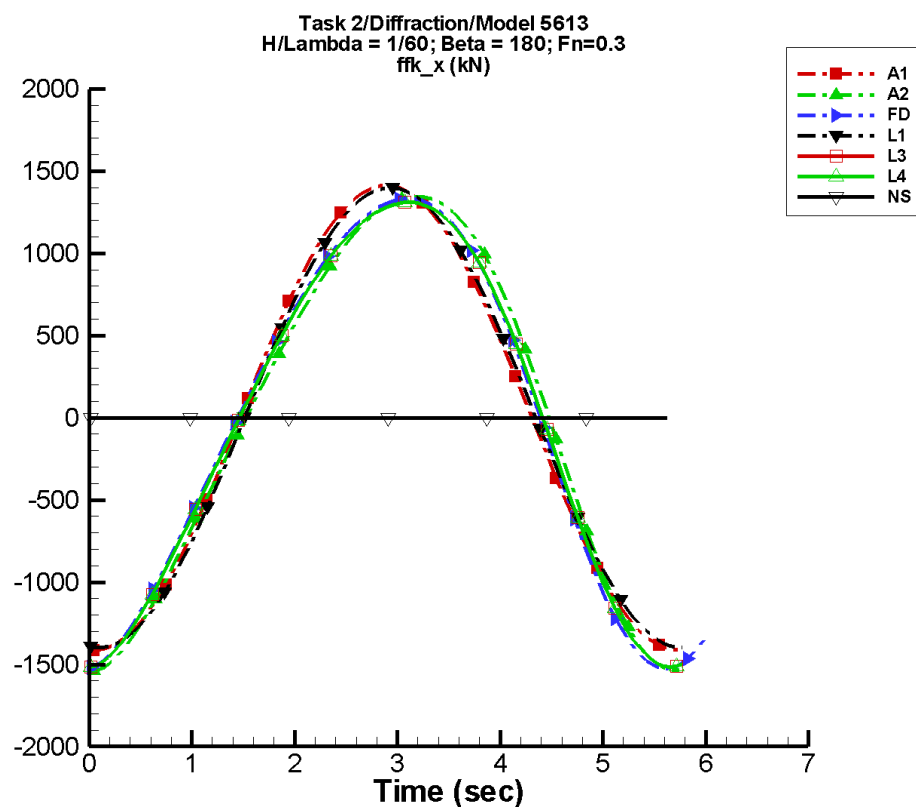
Table G–1393. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	589.	6.26E+05	-109	788.	-164
A2	3.72E+04	5.67E+05	-108	4.34E+04	-57
FD	3.76E+04	5.65E+05	-108	3.71E+04	-58
L1	378.	6.25E+05	-109	552.	-80
L3	3.28E+04	5.60E+05	-104	3.54E+04	-56
L4	3.28E+04	5.60E+05	-104	3.54E+04	-56
NF	—	—	—	—	—
NS	1.19E+03	5.30E+05	-95	6.56E+03	-7

Table G–1394. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-6.26E+05	6.26E+05	-6.20E+05	6.20E+05
A2	-5.73E+05	6.00E+05	-5.70E+05	5.95E+05
FD	-5.67E+05	6.02E+05	-5.67E+05	5.96E+05
L1	-6.25E+05	6.25E+05	-6.22E+05	6.22E+05
L3	-5.72E+05	5.90E+05	-5.72E+05	5.87E+05
L4	-5.72E+05	5.90E+05	-5.72E+05	5.87E+05
NF	—	—	—	—
NS	-5.31E+05	5.32E+05	-5.32E+05	5.27E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–698. Time history of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1395. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

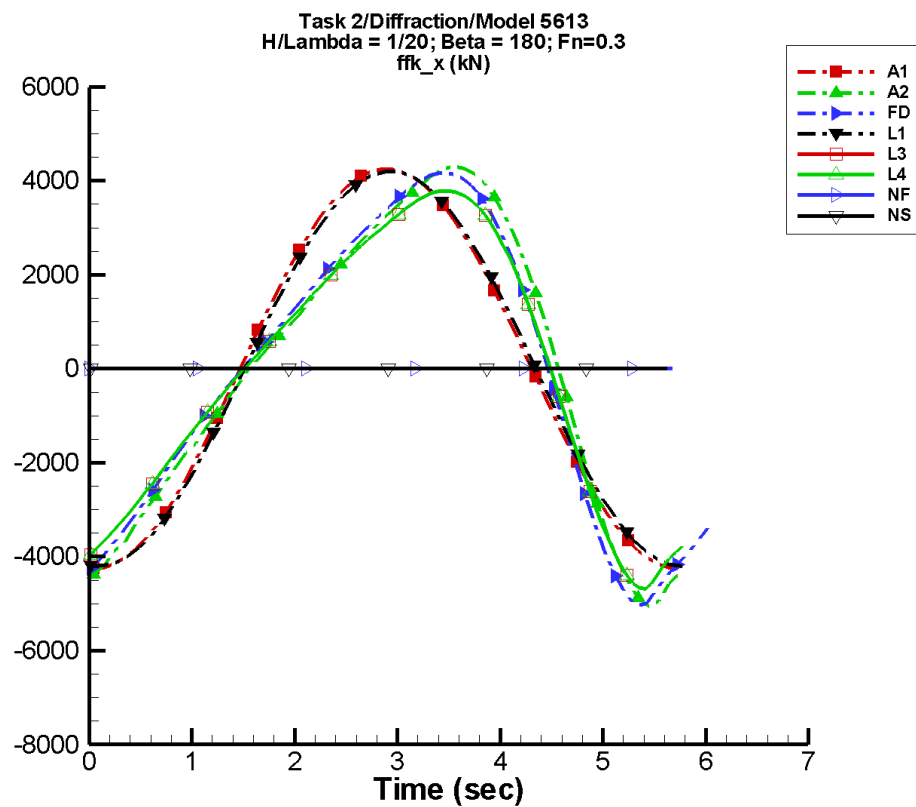| Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.77E+03	1.88E+06	-109	2.37E+03	-164
A2	2.58E+05	1.32E+06	-105	1.71E+05	-10
FD	2.53E+05	1.34E+06	-106	1.71E+05	-16
L1	1.13E+03	1.87E+06	-109	1.65E+03	-80
L3	2.25E+05	1.24E+06	-101	1.51E+05	-9
L4	2.25E+05	1.24E+06	-101	1.51E+05	-9
NF	—	—	—	—	—
NS	1.14E+05	1.21E+06	-91	1.48E+05	22

Table G–1396. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.88E+06	1.88E+06	-1.86E+06	1.86E+06
A2	-1.18E+06	1.67E+06	-1.11E+06	1.65E+06
FD	-1.23E+06	1.67E+06	-1.14E+06	1.65E+06
L1	-1.87E+06	1.87E+06	-1.87E+06	1.87E+06
L3	-1.17E+06	1.53E+06	-1.13E+06	1.52E+06
L4	-1.17E+06	1.53E+06	-1.13E+06	1.52E+06
NF	—	—	—	—
NS	-1.21E+06	1.39E+06	-1.15E+06	1.37E+06

Data identically zero, insufficient, or not available from NFA.

Figure G–699. Time history of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
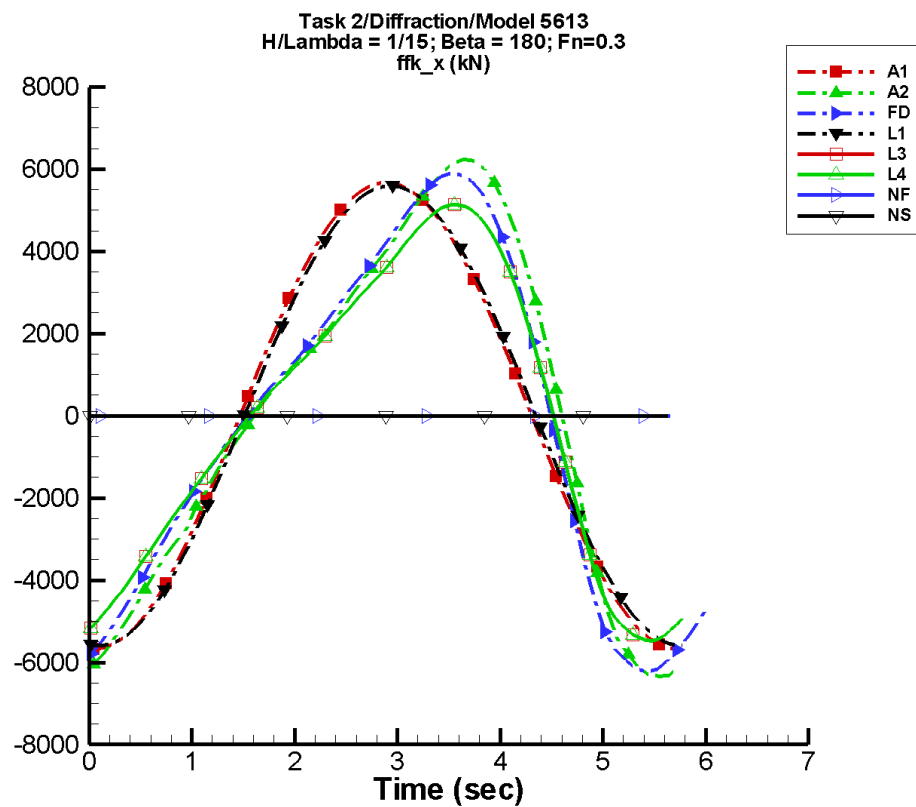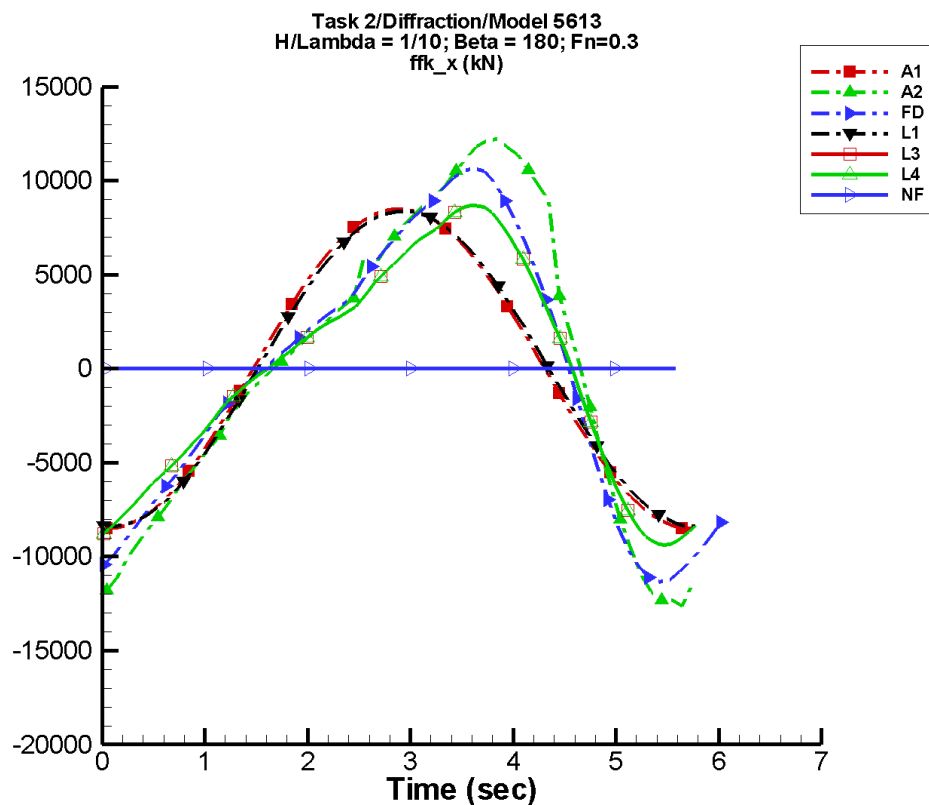
Table G–1397. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.36E+03	2.51E+06	-109	3.16E+03	-164
A2	3.93E+05	1.46E+06	-108	1.58E+05	-9
FD	3.77E+05	1.52E+06	-107	1.79E+05	-16
L1	1.51E+03	2.50E+06	-109	2.21E+03	-80
L3	3.26E+05	1.32E+06	-102	1.40E+05	-9
L4	3.26E+05	1.32E+06	-102	1.40E+05	-9
NF	—	—	—	—	—
NS	1.09E+05	1.20E+06	-86	1.06E+05	67

Table G–1398. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.51E+06	2.51E+06	-2.49E+06	2.49E+06
A2	-9.86E+05	1.96E+06	-9.80E+05	1.94E+06
FD	-1.05E+06	2.00E+06	-1.05E+06	1.98E+06
L1	-2.50E+06	2.50E+06	-2.49E+06	2.49E+06
L3	-9.20E+05	1.73E+06	-9.21E+05	1.73E+06
L4	-9.20E+05	1.73E+06	-9.21E+05	1.73E+06
NF	—	—	—	—
NS	-9.89E+05	1.38E+06	-9.52E+05	1.37E+06

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–700. Time history of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
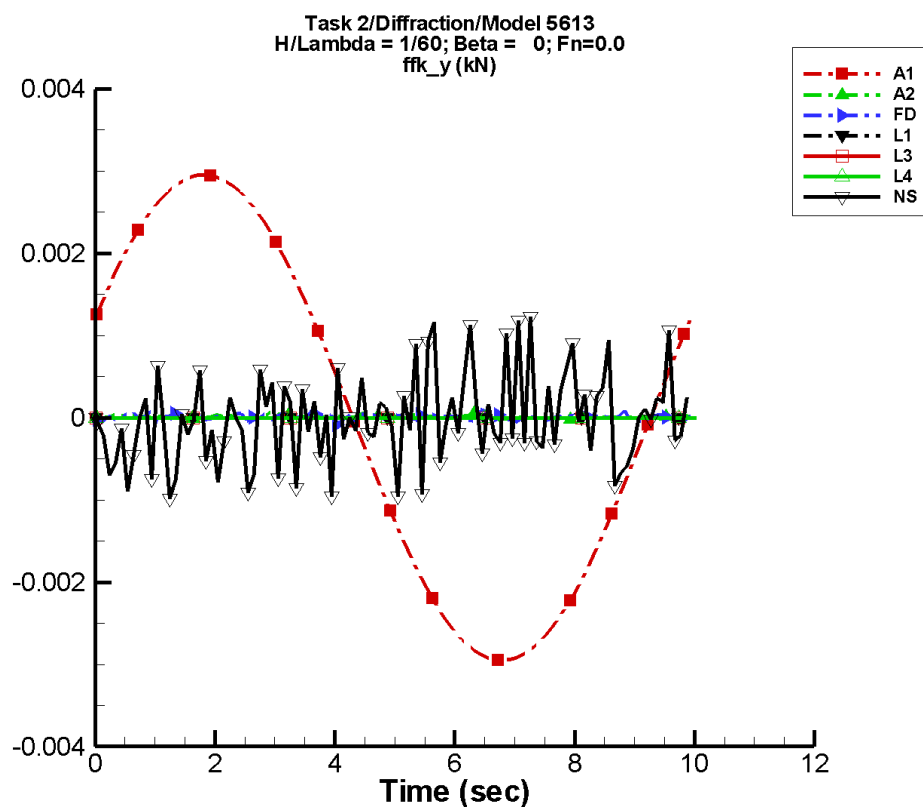
Table G–1399. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	3.55E+03	3.77E+06	-109	4.74E+03	-164
A2	1.66E+05	1.13E+06	-96	2.85E+05	174
FD	2.19E+05	1.25E+06	-102	2.09E+05	176
L1	2.27E+03	3.75E+06	-109	3.31E+03	-80
L3	1.29E+05	8.65E+05	-93	2.68E+05	178
L4	1.29E+05	8.65E+05	-93	2.68E+05	178
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1400. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
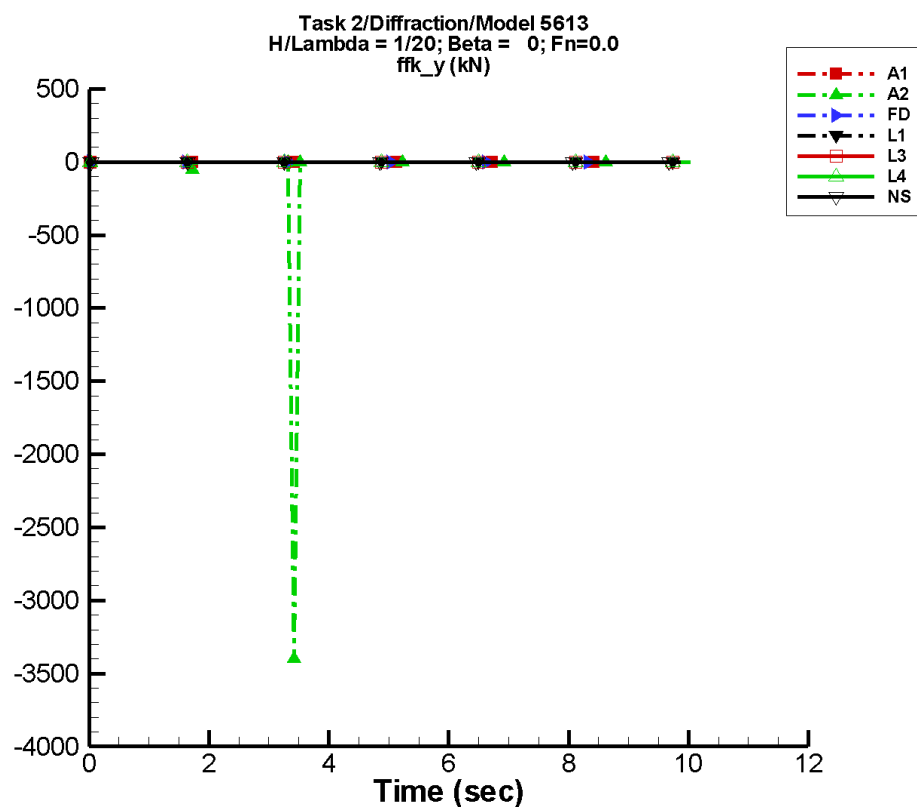
Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.77E+06	3.77E+06	-3.73E+06	3.73E+06
A2	-1.17E+06	1.66E+06	-1.15E+06	1.61E+06
FD	-1.19E+06	1.67E+06	-1.19E+06	1.59E+06
L1	-3.75E+06	3.75E+06	-3.73E+06	3.73E+06
L3	-9.14E+05	1.31E+06	-9.05E+05	1.23E+06
L4	-9.14E+05	1.31E+06	-9.05E+05	1.23E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–701. Time history of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
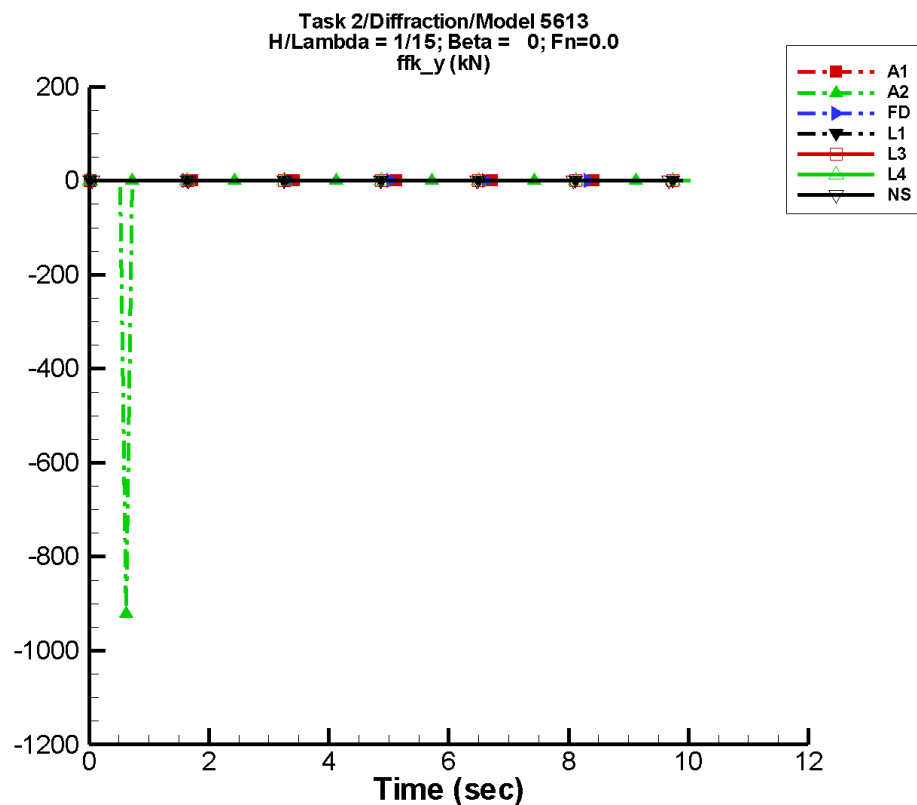
Table G–1401. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-11.0	6.26E+05	105	17.6	30
A2	3.66E+04	5.67E+05	99	4.09E+04	-145
FD	3.81E+04	5.65E+05	99	3.82E+04	-141
L1	-477.	6.25E+05	105	591.	155
L3	3.29E+04	5.60E+05	100	3.65E+04	-131
L4	3.29E+04	5.60E+05	100	3.65E+04	-131
NF	—	—	—	—	—
NS	653.	5.30E+05	92	5.88E+03	165

Table G–1402. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-6.26E+05	6.26E+05	-6.26E+05	6.26E+05
A2	-5.73E+05	6.00E+05	-5.72E+05	6.00E+05
FD	-5.67E+05	6.02E+05	-5.68E+05	6.01E+05
L1	-6.25E+05	6.25E+05	-6.25E+05	6.25E+05
L3	-5.72E+05	5.90E+05	-5.72E+05	5.90E+05
L4	-5.72E+05	5.90E+05	-5.72E+05	5.90E+05
NF	—	—	—	—
NS	-5.30E+05	5.32E+05	-5.24E+05	5.29E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–702. Time history of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
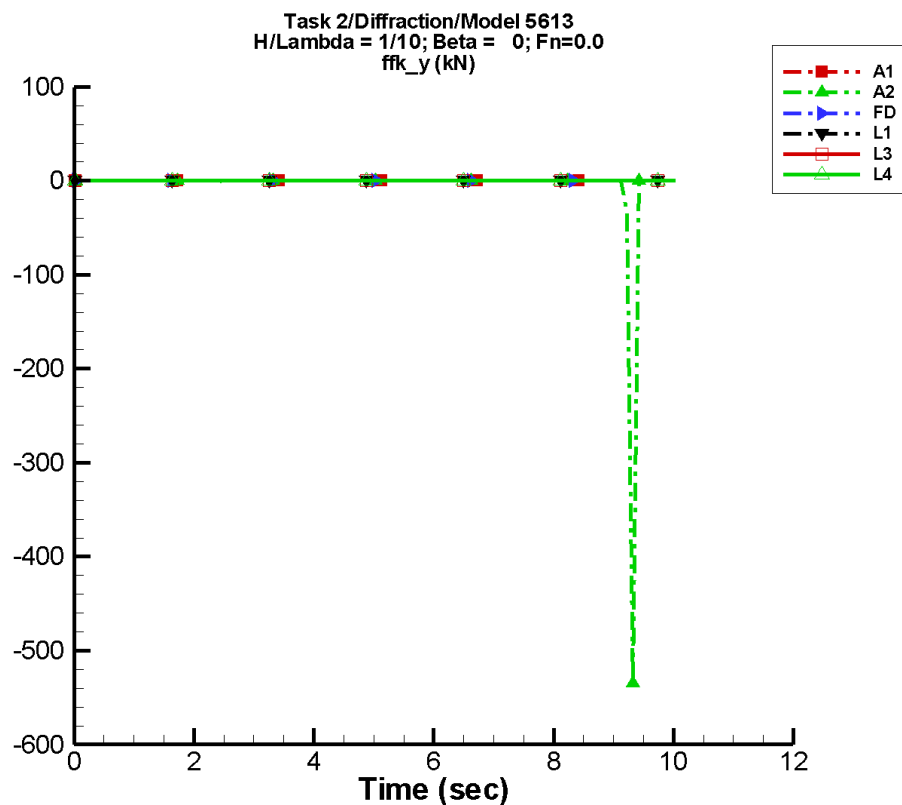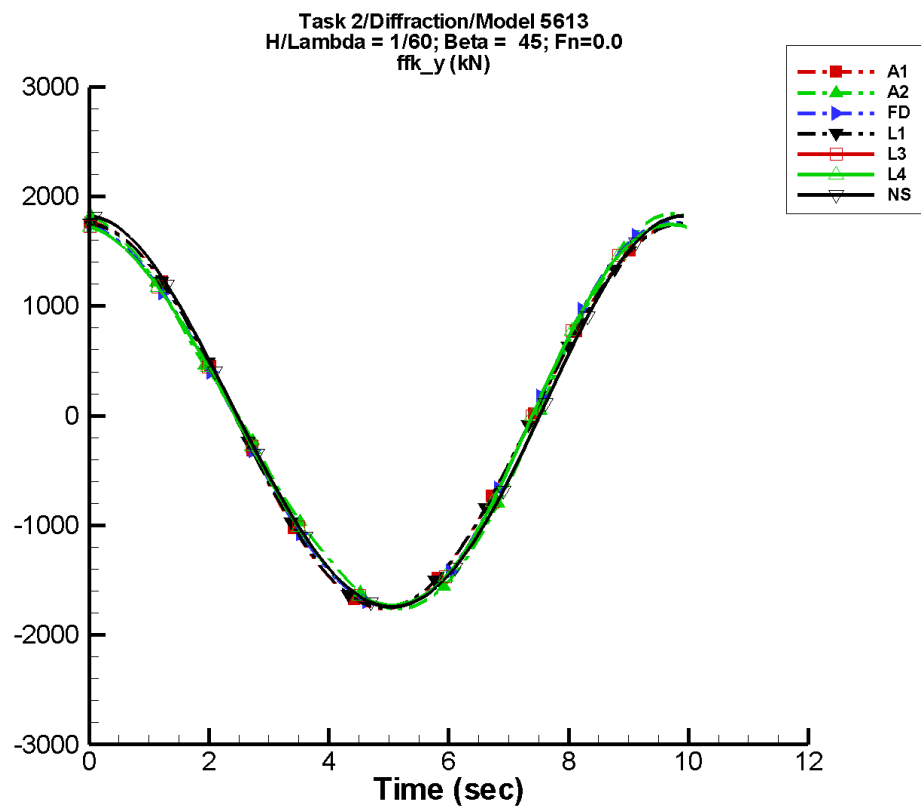
Table G–1403. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-33.4	1.88E+06	105	53.1	30
A2	2.56E+05	1.33E+06	96	1.70E+05	175
FD	2.51E+05	1.35E+06	96	1.76E+05	176
L1	-1.43E+03	1.87E+06	105	1.77E+03	155
L3	2.21E+05	1.26E+06	96	1.66E+05	-178
L4	2.21E+05	1.26E+06	96	1.66E+05	-178
NF	—	—	—	—	—
NS	1.11E+05	1.21E+06	89	1.41E+05	148

Table G–1404. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.88E+06	1.88E+06	-1.88E+06	1.88E+06
A2	-1.18E+06	1.67E+06	-1.18E+06	1.66E+06
FD	-1.23E+06	1.67E+06	-1.22E+06	1.67E+06
L1	-1.87E+06	1.87E+06	-1.87E+06	1.87E+06
L3	-1.17E+06	1.53E+06	-1.17E+06	1.53E+06
L4	-1.17E+06	1.53E+06	-1.17E+06	1.53E+06
NF	—	—	—	—
NS	-1.17E+06	1.39E+06	-1.10E+06	1.38E+06

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta =   0; Fn=0.3
ffk_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–703. Time history of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1405. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
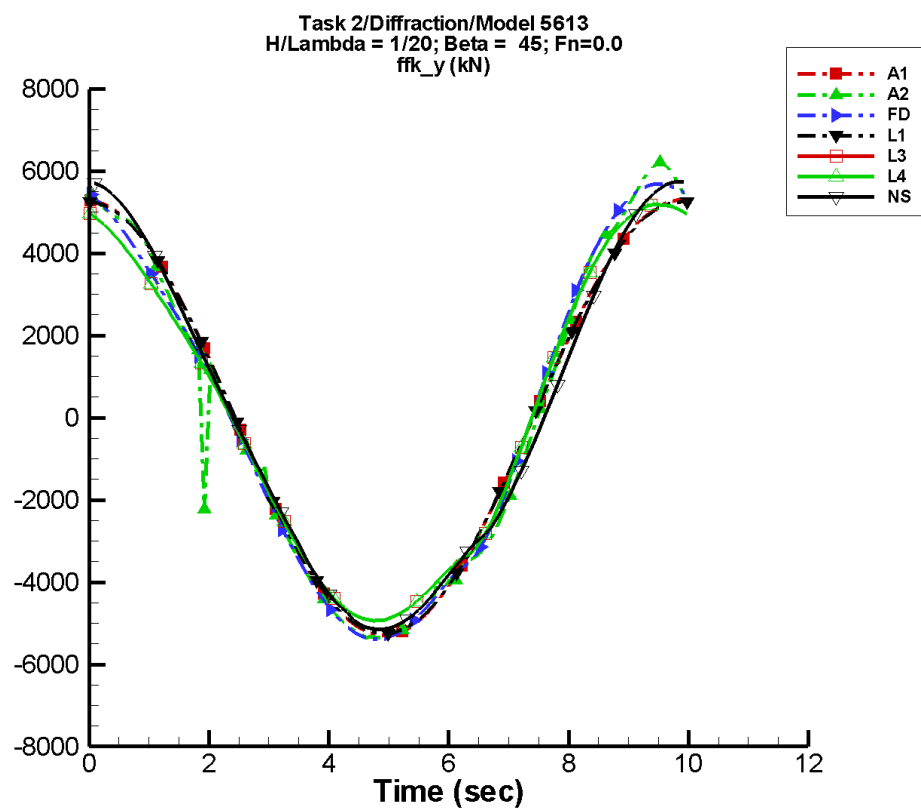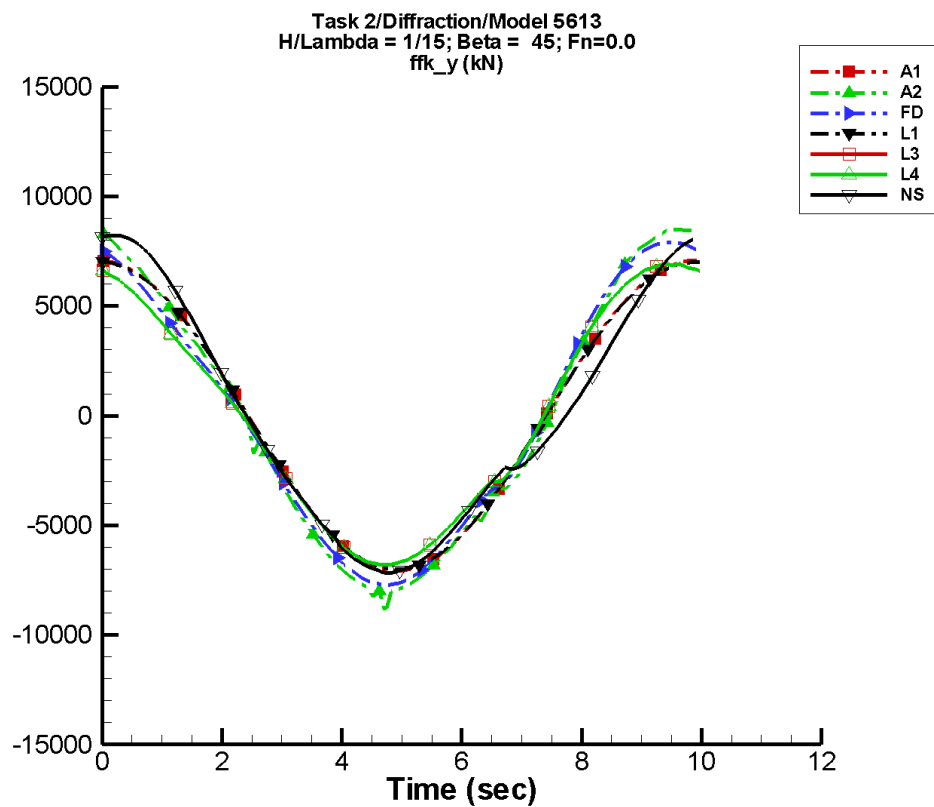
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-44.5	2.51E+06	105	71.1	30
A2	3.94E+05	1.46E+06	99	1.68E+05	176
FD	3.74E+05	1.51E+06	97	1.77E+05	178
L1	-1.91E+03	2.50E+06	105	2.36E+03	155
L3	3.22E+05	1.31E+06	97	1.41E+05	177
L4	3.22E+05	1.31E+06	97	1.41E+05	177
NF	—	—	—	—	—
NS	1.10E+05	1.20E+06	85	9.97E+04	107

Table G–1406. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.51E+06	2.51E+06	-2.51E+06	2.51E+06
A2	-1.00E+06	1.96E+06	-9.82E+05	1.96E+06
FD	-1.05E+06	2.00E+06	-1.05E+06	2.00E+06
L1	-2.50E+06	2.50E+06	-2.50E+06	2.50E+06
L3	-9.20E+05	1.73E+06	-9.20E+05	1.73E+06
L4	-9.20E+05	1.73E+06	-9.20E+05	1.73E+06
NF	—	—	—	—
NS	-9.72E+05	1.38E+06	-9.59E+05	1.38E+06

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 0; Fn=0.3
ffk_my (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–704. Time history of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
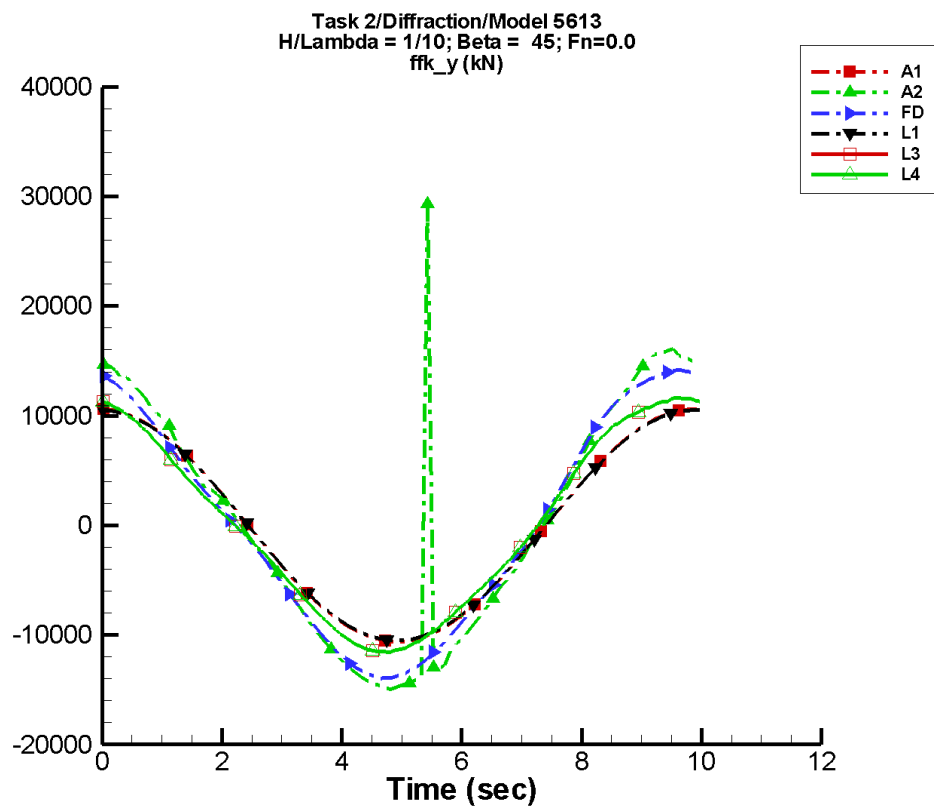
Table G–1407. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-66.2	3.77E+06	105	106.	30
A2	1.51E+05	1.15E+06	89	3.13E+05	0
FD	2.25E+05	1.27E+06	93	1.82E+05	-15
L1	-2.86E+03	3.75E+06	105	3.54E+03	155
L3	1.31E+05	8.99E+05	90	2.35E+05	-13
L4	1.31E+05	8.99E+05	90	2.35E+05	-13
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1408. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.77E+06	3.77E+06	-3.77E+06	3.77E+06
A2	-1.17E+06	1.67E+06	-1.16E+06	1.66E+06
FD	-1.19E+06	1.67E+06	-1.19E+06	1.60E+06
L1	-3.75E+06	3.75E+06	-3.75E+06	3.75E+06
L3	-9.14E+05	1.31E+06	-9.13E+05	1.29E+06
L4	-9.14E+05	1.31E+06	-9.13E+05	1.29E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–705. Time history of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
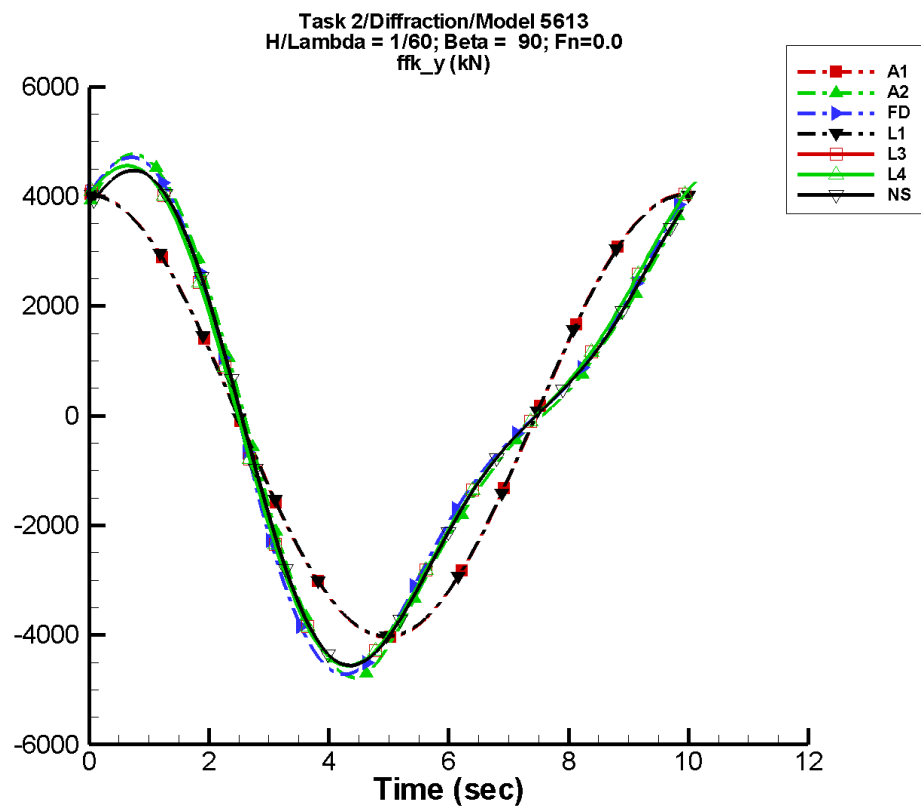
Table G–1409. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	167.	7.12E+05	94	249.	-156
A2	3.72E+04	6.20E+05	90	3.41E+04	133
FD	3.81E+04	6.18E+05	96	3.35E+04	137
L1	90.2	7.09E+05	94	140.	-167
L3	3.33E+04	6.11E+05	92	3.51E+04	143
L4	3.33E+04	6.11E+05	92	3.51E+04	143
NF	—	—	—	—	—
NS	6.23E+03	6.28E+05	90	1.17E+04	116

Table G–1410. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-7.12E+05	7.12E+05	-7.10E+05	7.11E+05
A2	-5.52E+05	6.76E+05	-5.51E+05	6.76E+05
FD	-5.44E+05	6.74E+05	-5.43E+05	6.74E+05
L1	-7.09E+05	7.09E+05	-7.08E+05	7.08E+05
L3	-5.47E+05	6.59E+05	-5.46E+05	6.58E+05
L4	-5.47E+05	6.59E+05	-5.46E+05	6.58E+05
NF	—	—	—	—
NS	-6.05E+05	6.40E+05	-6.00E+05	6.41E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–706. Time history of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

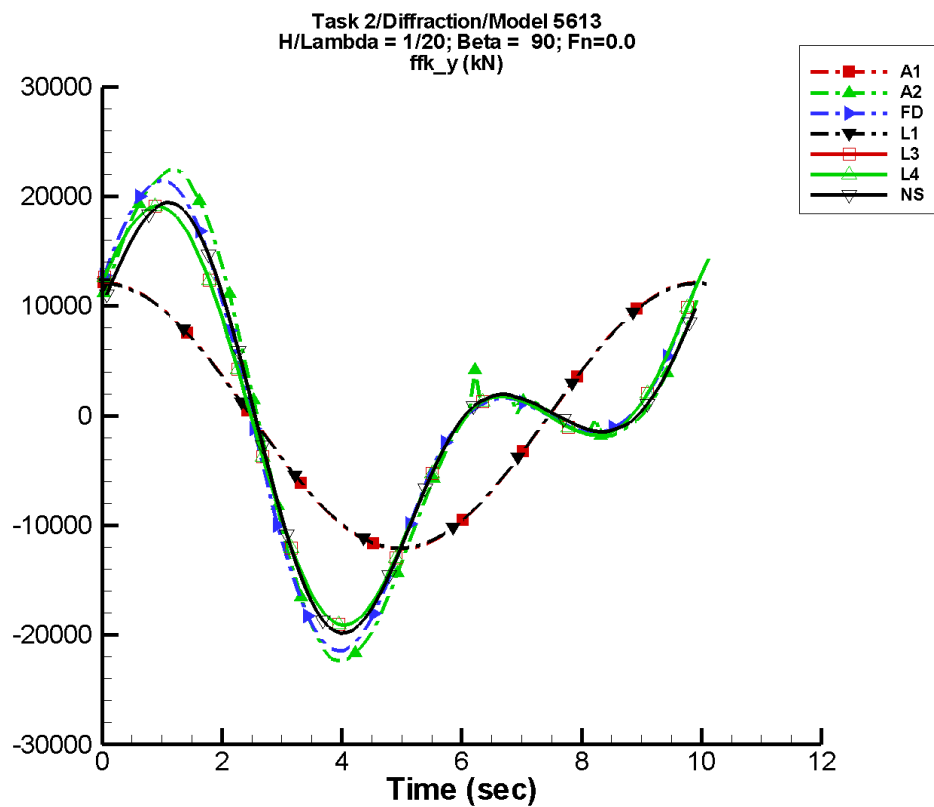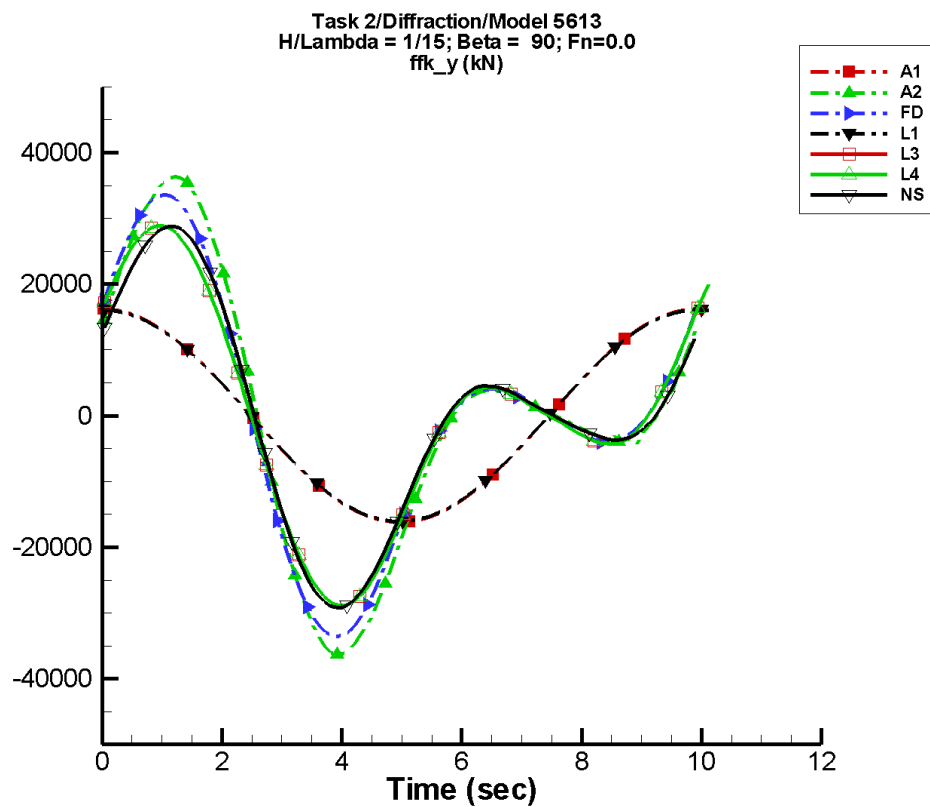Table G–1411. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	503.	2.14E+06	94	748.	-156
A2	2.56E+05	1.41E+06	89	1.76E+05	85
FD	2.48E+05	1.44E+06	96	1.79E+05	107
L1	271.	2.13E+06	94	419.	-167
L3	2.20E+05	1.32E+06	92	1.61E+05	109
L4	2.20E+05	1.32E+06	92	1.61E+05	109
NF	—	—	—	—	—
NS	5.84E+04	1.40E+06	87	8.46E+04	76

Table G–1412. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.14E+06	2.14E+06	-2.14E+06	2.14E+06
A2	-9.76E+05	1.80E+06	-9.73E+05	1.79E+06
FD	-9.89E+05	1.81E+06	-9.87E+05	1.80E+06
L1	-2.13E+06	2.13E+06	-2.12E+06	2.12E+06
L3	-9.09E+05	1.63E+06	-9.09E+05	1.63E+06
L4	-9.09E+05	1.63E+06	-9.09E+05	1.63E+06
NF	—	—	—	—
NS	-1.23E+06	1.51E+06	-1.22E+06	1.52E+06

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 45; Fn=0.3
ffk_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–707. Time history of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
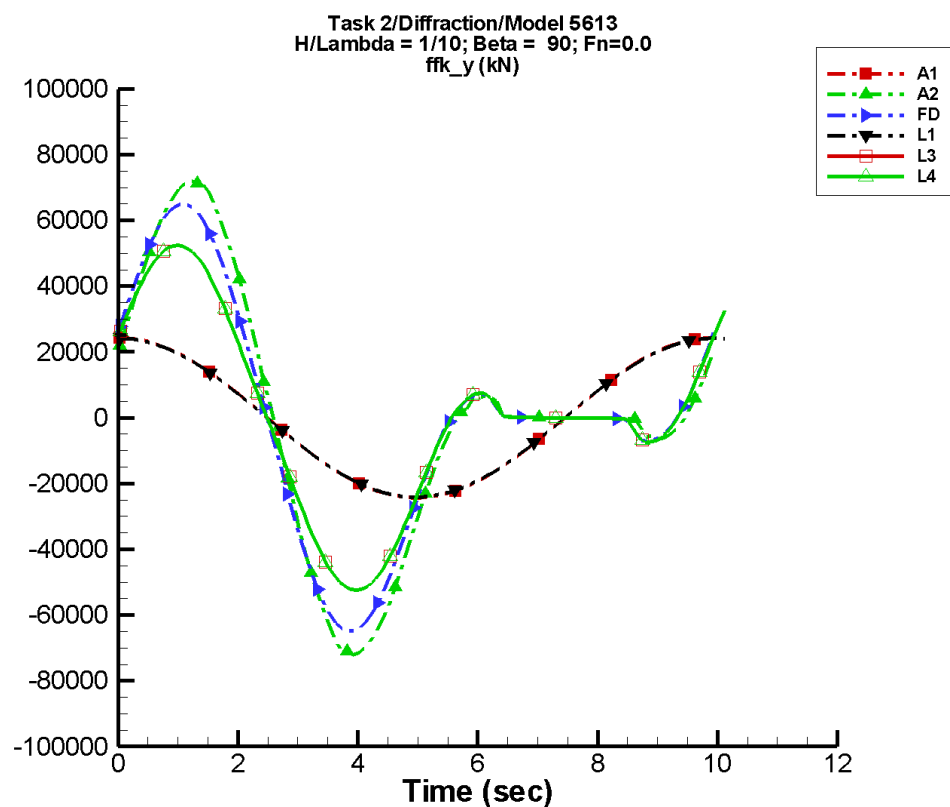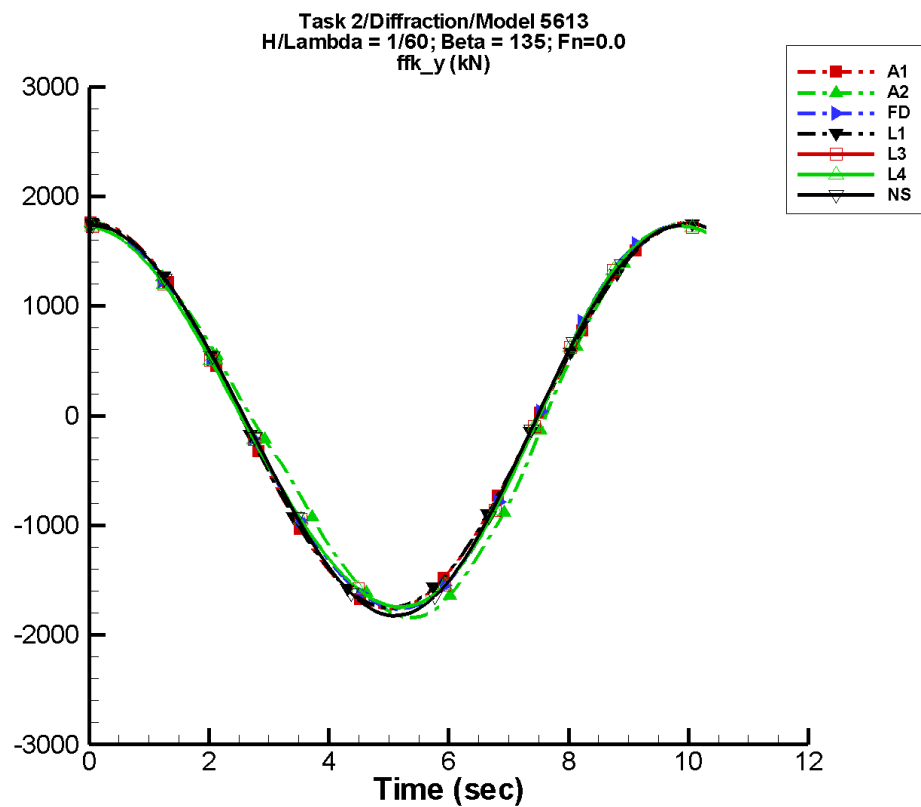
Table G–1413. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	672.	2.86E+06	94	999.	-156
A2	3.93E+05	1.58E+06	91	2.73E+05	56
FD	3.77E+05	1.64E+06	97	2.53E+05	70
L1	361.	2.83E+06	94	559.	-167
L3	3.25E+05	1.43E+06	93	2.06E+05	62
L4	3.25E+05	1.43E+06	93	2.06E+05	62
NF	—	—	—	—	—
NS	1.31E+05	1.64E+06	87	1.71E+05	62

Table G–1414. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.86E+06	2.86E+06	-2.85E+06	2.85E+06
A2	-1.06E+06	2.15E+06	-1.06E+06	2.14E+06
FD	-1.13E+06	2.18E+06	-1.13E+06	2.17E+06
L1	-2.83E+06	2.83E+06	-2.83E+06	2.83E+06
L3	-9.76E+05	1.86E+06	-9.74E+05	1.86E+06
L4	-9.76E+05	1.86E+06	-9.74E+05	1.86E+06
NF	—	—	—	—
NS	-1.37E+06	1.87E+06	-1.36E+06	1.88E+06

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–708. Time history of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1415. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.01E+03	4.29E+06	94	1.50E+03	-156
A2	1.61E+05	1.15E+06	87	5.81E+05	-30
FD	2.10E+05	1.35E+06	97	4.97E+05	-10
L1	541.	4.25E+06	94	839.	-167
L3	1.23E+05	9.05E+05	91	4.60E+05	-30
L4	1.23E+05	9.05E+05	91	4.60E+05	-30
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1416. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
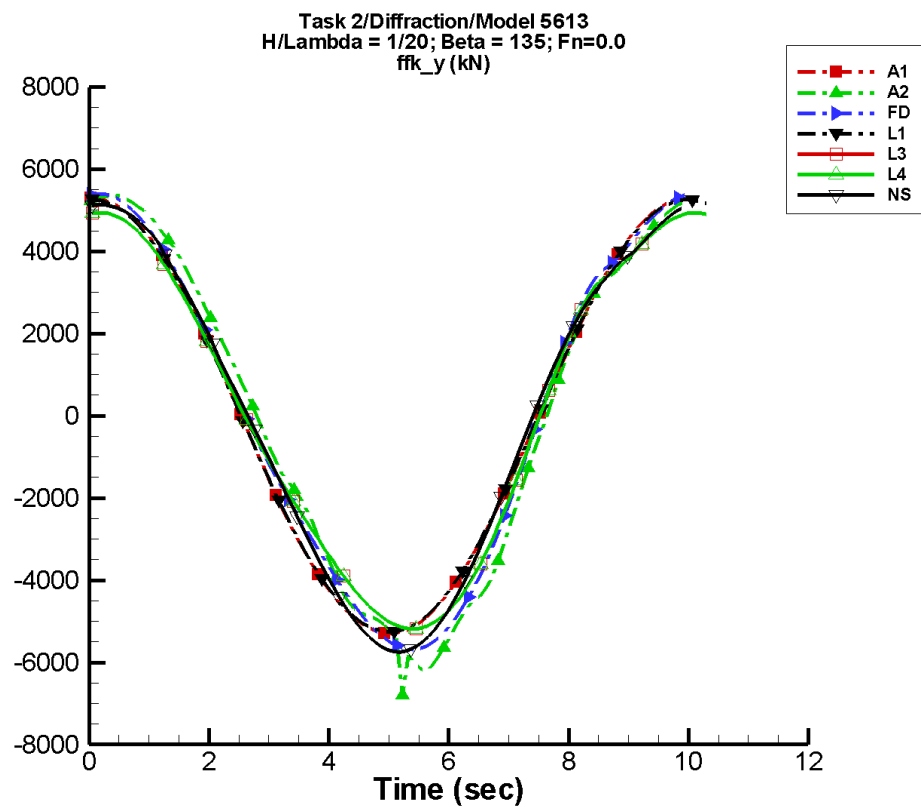
Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.29E+06	4.29E+06	-4.28E+06	4.28E+06
A2	-1.27E+06	1.89E+06	-1.27E+06	1.87E+06
FD	-1.34E+06	1.89E+06	-1.34E+06	1.86E+06
L1	-4.25E+06	4.25E+06	-4.25E+06	4.25E+06
L3	-1.02E+06	1.47E+06	-1.01E+06	1.41E+06
L4	-1.02E+06	1.47E+06	-1.01E+06	1.41E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–709. Time history of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
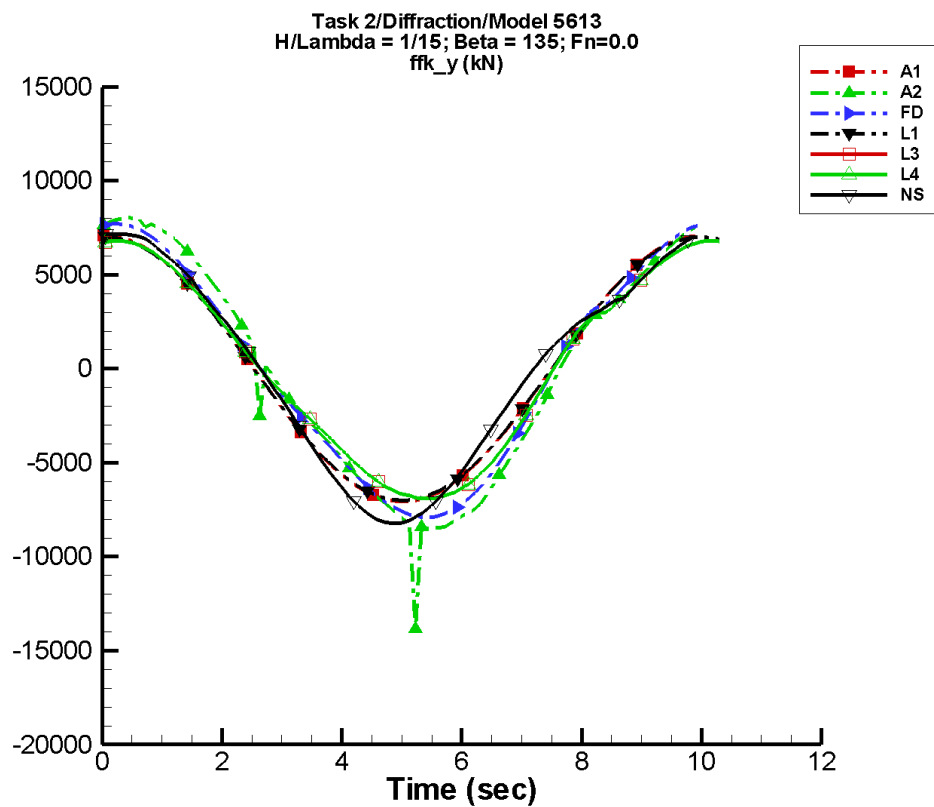
Table G–1417. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-147.	2.33E+05	-4	223.	-25
A2	3.70E+04	1.83E+05	-8	3.34E+04	-104
FD	3.89E+04	1.70E+05	-7	3.40E+04	-107
L1	-96.8	2.34E+05	-4	154.	-37
L3	3.29E+04	1.65E+05	-4	2.92E+04	-96
L4	3.29E+04	1.65E+05	-4	2.92E+04	-96
NF	—	—	—	—	—
NS	254.	8.97E+04	-2	2.53E+03	-94

Table G–1418. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.33E+05	2.33E+05	-2.30E+05	2.30E+05
A2	-1.05E+05	2.45E+05	-1.05E+05	2.43E+05
FD	-9.03E+04	2.34E+05	-9.01E+04	2.32E+05
L1	-2.34E+05	2.34E+05	-2.33E+05	2.33E+05
L3	-9.38E+04	2.20E+05	-9.37E+04	2.19E+05
L4	-9.38E+04	2.20E+05	-9.37E+04	2.19E+05
NF	—	—	—	—
NS	-8.66E+04	9.28E+04	-8.59E+04	9.20E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–710. Time history of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
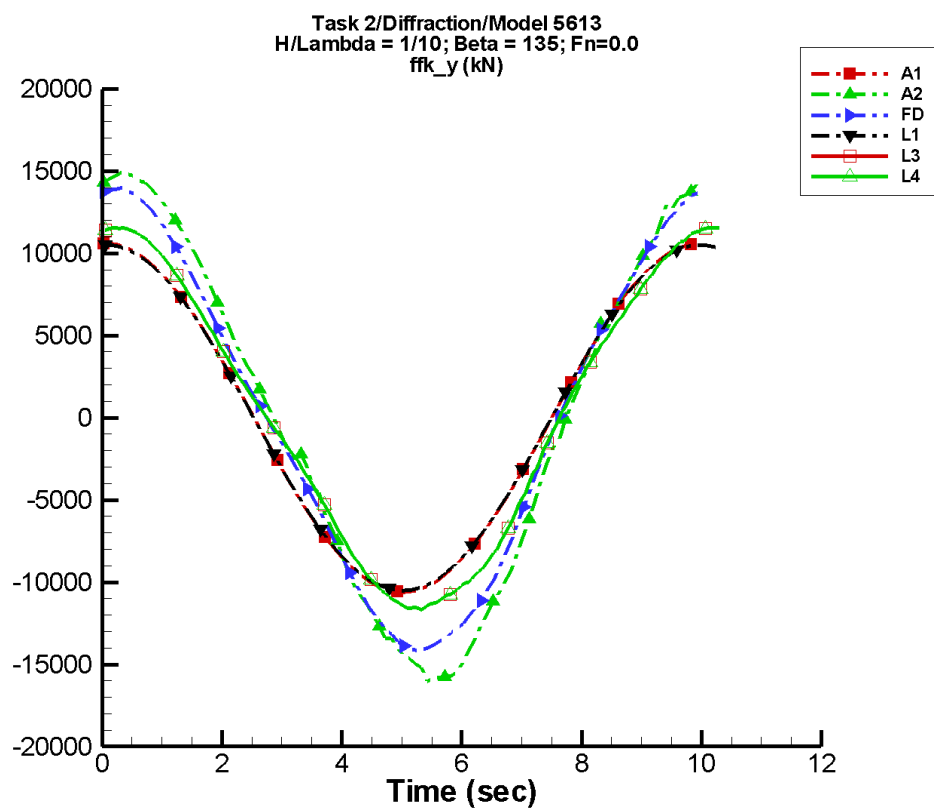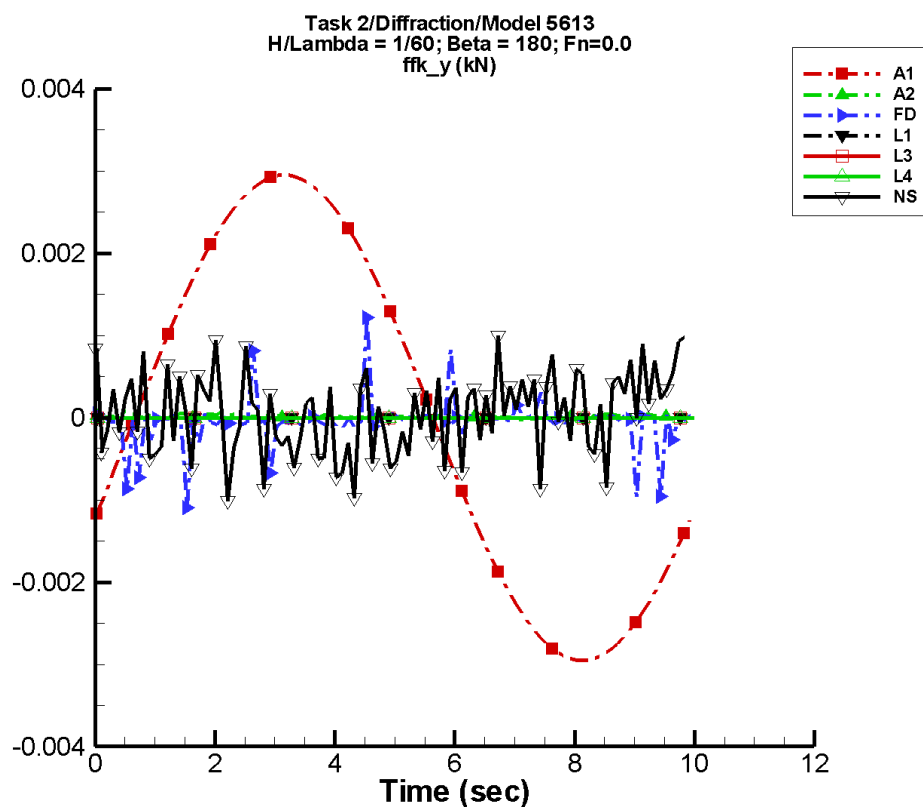
Table G–1419. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-443.	7.00E+05	-4	670.	-25
A2	2.56E+05	3.31E+05	-7	2.09E+05	-105
FD	2.51E+05	2.91E+05	-7	2.04E+05	-107
L1	-290.	7.03E+05	-4	462.	-37
L3	2.19E+05	2.28E+05	-2	1.75E+05	-96
L4	2.19E+05	2.28E+05	-2	1.75E+05	-96
NF	—	—	—	—	—
NS	1.01E+05	1.02E+05	4	1.21E+05	-98

Table G–1420. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-7.00E+05	7.00E+05	-6.93E+05	6.92E+05
A2	-7.26E+04	7.60E+05	-5.76E+04	7.36E+05
FD	-6.25E+04	7.01E+05	-4.61E+04	6.94E+05
L1	-7.02E+05	7.02E+05	-7.00E+05	7.00E+05
L3	-6.40E+04	5.78E+05	-5.72E+04	5.77E+05
L4	-6.40E+04	5.78E+05	-5.72E+04	5.77E+05
NF	—	—	—	—
NS	-7.97E+04	2.99E+05	-6.80E+04	2.95E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.3
ffk_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–711. Time history of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1421. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
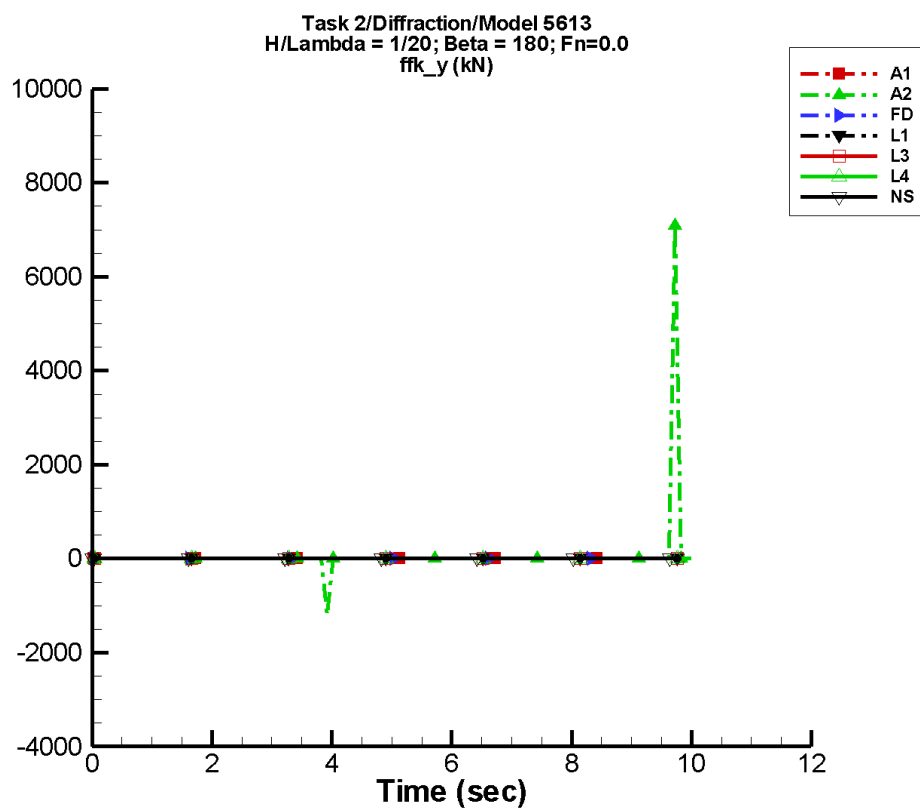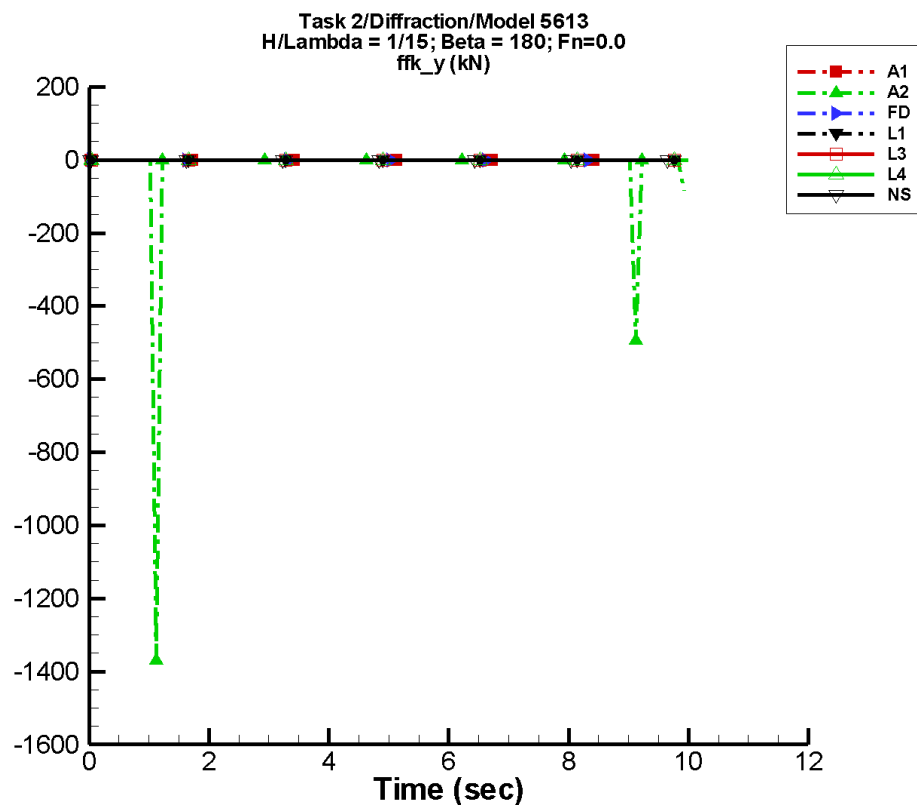
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-591.	9.34E+05	-4	895.	-25
A2	3.94E+05	3.97E+05	-7	3.17E+05	-105
FD	3.79E+05	3.18E+05	-7	2.95E+05	-106
L1	-387.	9.37E+05	-4	616.	-37
L3	3.25E+05	2.10E+05	-2	2.44E+05	-96
L4	3.25E+05	2.10E+05	-2	2.44E+05	-96
NF	—	—	—	—	—
NS	1.08E+05	7.99E+04	171	1.23E+05	-98

Table G–1422. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-9.34E+05	9.34E+05	-9.25E+05	9.25E+05
A2	-4.19E+04	1.05E+06	-1.88E+04	1.04E+06
FD	-3.65E+04	9.31E+05	-1.11E+04	9.22E+05
L1	-9.37E+05	9.37E+05	-9.33E+05	9.33E+05
L3	-3.64E+04	7.18E+05	-2.68E+04	7.16E+05
L4	-3.64E+04	7.18E+05	-2.68E+04	7.16E+05
NF	—	—	—	—
NS	-9.90E+03	3.30E+05	-627.	3.28E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.3
ffk_my (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–712. Time history of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
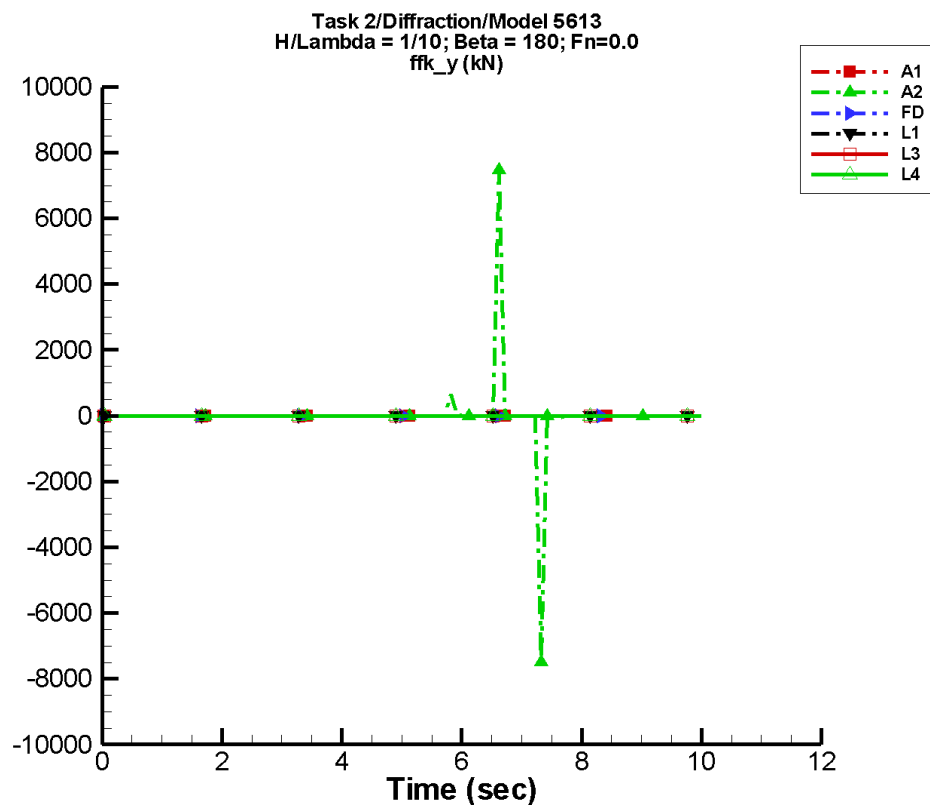
Table G–1423. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-886.	1.40E+06	-4	1.34E+03	-25
A2	1.91E+05	8.13E+04	15	2.72E+05	58
FD	2.27E+05	1.09E+05	5	2.03E+05	77
L1	-581.	1.41E+06	-4	924.	-37
L3	1.02E+05	1.00E+05	156	3.34E+05	69
L4	1.02E+05	1.00E+05	156	3.34E+05	69
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1424. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.40E+06	1.40E+06	-1.39E+06	1.39E+06
A2	-1.08E+06	1.07E+06	-9.59E+05	9.15E+05
FD	-6.39E+05	1.01E+06	-5.54E+05	8.56E+05
L1	-1.40E+06	1.40E+06	-1.40E+06	1.40E+06
L3	-9.36E+05	8.25E+05	-9.75E+05	7.27E+05
L4	-9.36E+05	8.25E+05	-9.75E+05	7.27E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–713. Time history of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
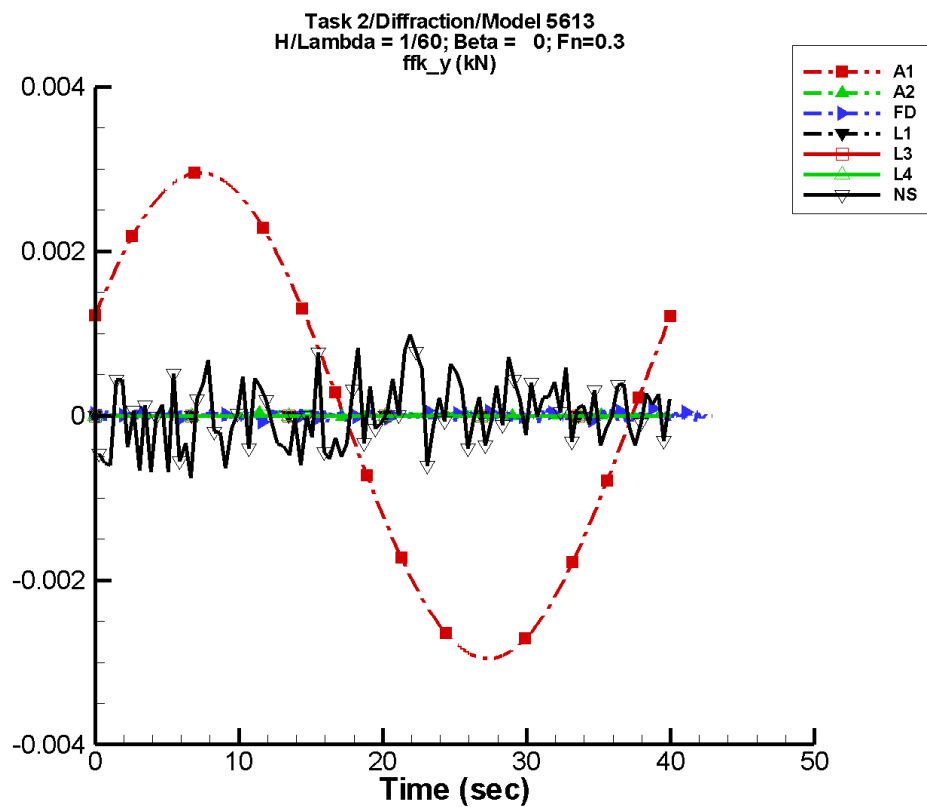
Table G–1425. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	281.	7.12E+05	-96	429.	179
A2	3.71E+04	6.18E+05	-98	3.61E+04	31
FD	3.84E+04	6.16E+05	-90	3.49E+04	54
L1	37.4	7.08E+05	-97	59.7	117
L3	3.35E+04	6.10E+05	-95	3.65E+04	35
L4	3.35E+04	6.10E+05	-95	3.65E+04	35
NF	—	—	—	—	—
NS	675.	5.44E+05	-90	5.02E+03	103

Table G–1426. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
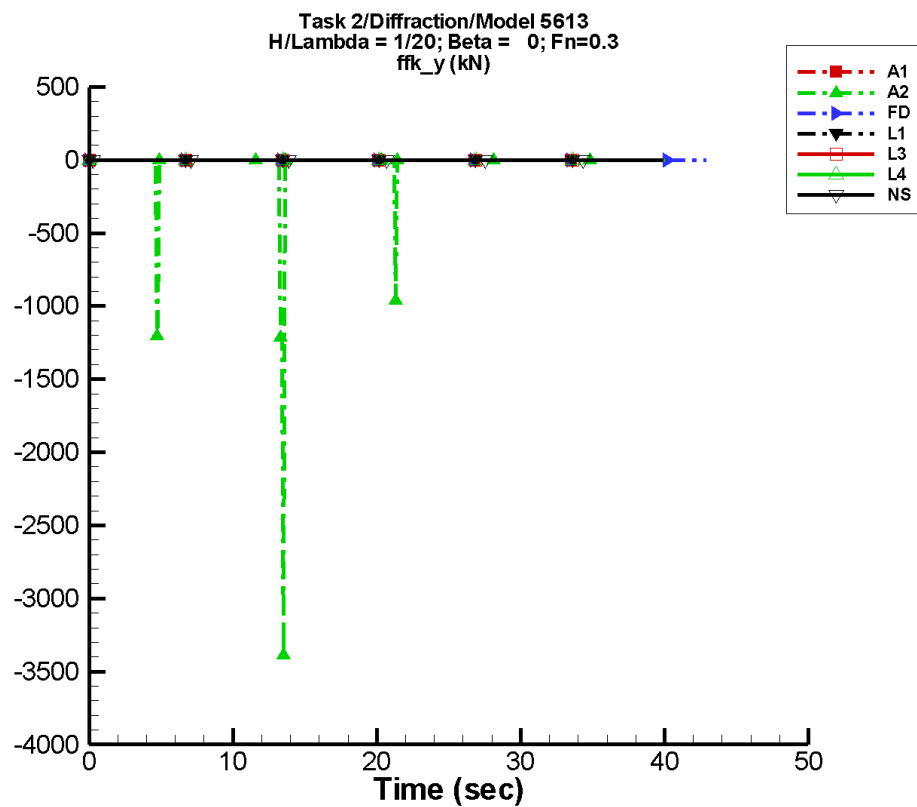
Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-7.11E+05	7.11E+05	-7.14E+05	6.95E+05
A2	-5.52E+05	6.76E+05	-5.51E+05	6.59E+05
FD	-5.44E+05	6.74E+05	-5.35E+05	6.58E+05
L1	-7.08E+05	7.08E+05	-7.14E+05	7.02E+05
L3	-5.47E+05	6.59E+05	-5.43E+05	6.53E+05
L4	-5.47E+05	6.59E+05	-5.43E+05	6.53E+05
NF	—	—	—	—
NS	-5.35E+05	5.46E+05	-5.35E+05	5.41E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 135; Fn=0.3
ffk_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–714. Time history of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
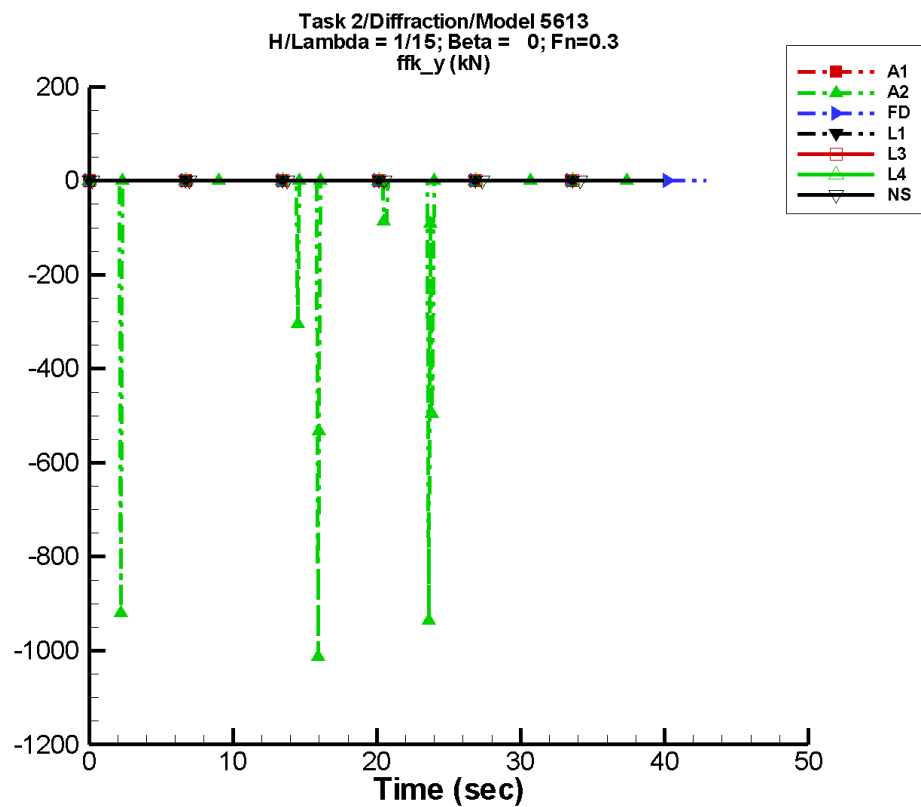
Table G–1427. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	844.	2.14E+06	-96	1.29E+03	179
A2	2.54E+05	1.42E+06	-98	1.83E+05	78
FD	2.46E+05	1.44E+06	-90	1.85E+05	87
L1	112.	2.13E+06	-97	179.	117
L3	2.20E+05	1.33E+06	-95	1.65E+05	69
L4	2.20E+05	1.33E+06	-95	1.65E+05	69
NF	—	—	—	—	—
NS	1.06E+05	1.21E+06	-90	1.47E+05	107

Table G–1428. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.14E+06	2.14E+06	-2.15E+06	2.09E+06
A2	-9.76E+05	1.80E+06	-9.56E+05	1.75E+06
FD	-9.89E+05	1.80E+06	-9.87E+05	1.77E+06
L1	-2.13E+06	2.13E+06	-2.14E+06	2.11E+06
L3	-9.09E+05	1.63E+06	-9.20E+05	1.62E+06
L4	-9.09E+05	1.63E+06	-9.20E+05	1.62E+06
NF	—	—	—	—
NS	-9.78E+05	1.39E+06	-9.54E+05	1.38E+06

Data identically zero, insufficient, or not available from NFA.

Figure G–715. Time history of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
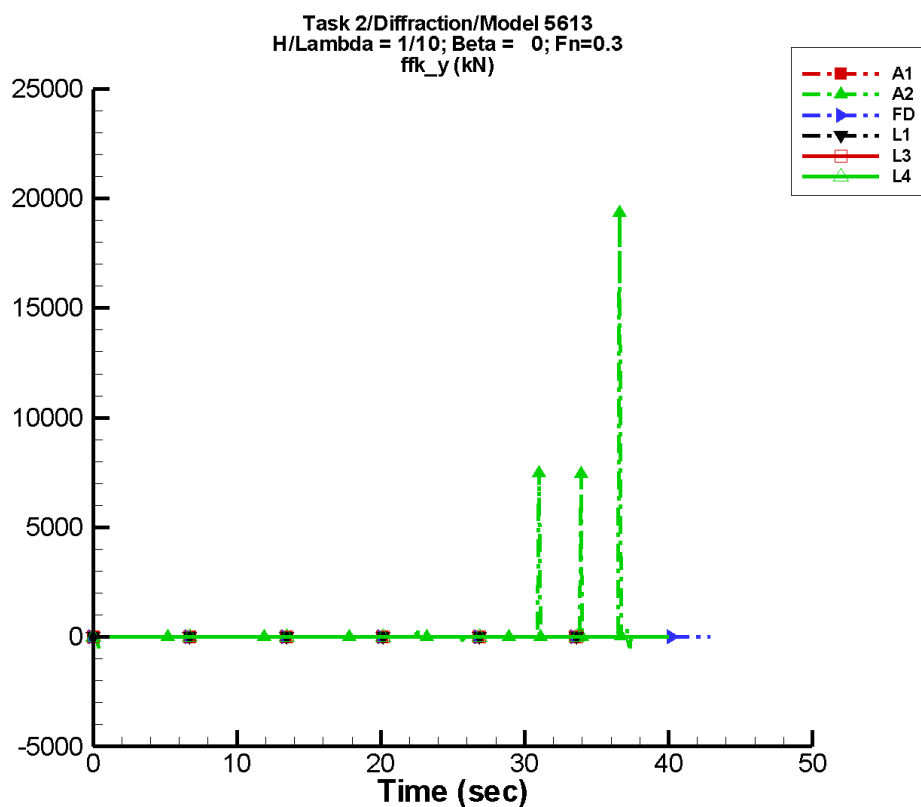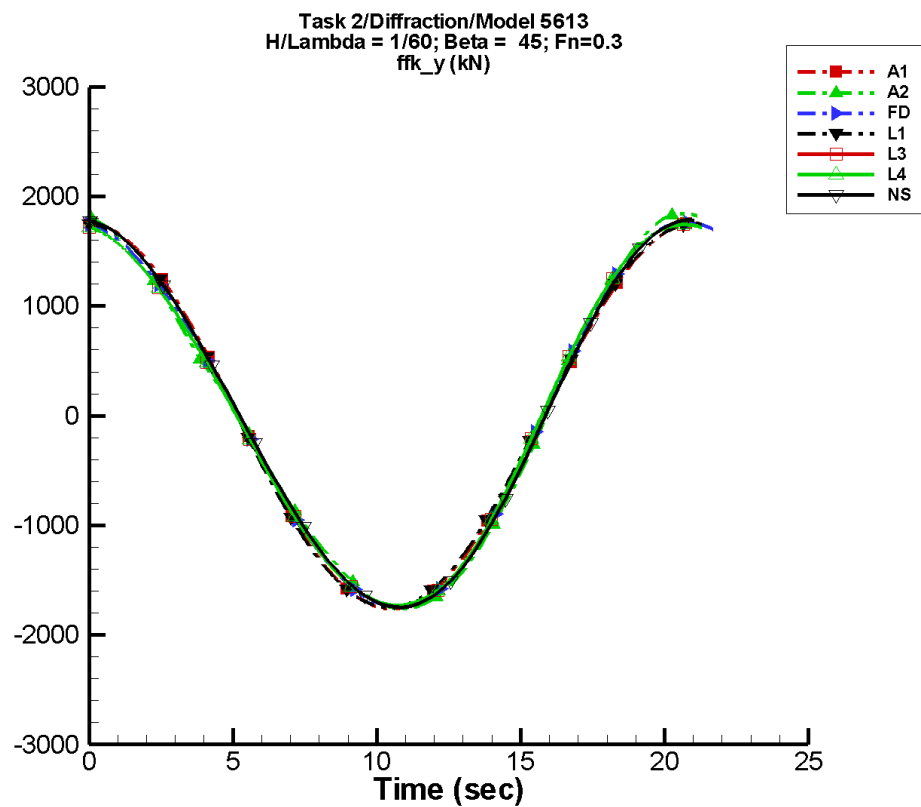
Table G–1429. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.13E+03	2.86E+06	-96	1.72E+03	179
A2	3.92E+05	1.59E+06	-100	2.79E+05	106
FD	3.75E+05	1.65E+06	-91	2.51E+05	123
L1	149.	2.83E+06	-97	239.	117
L3	3.25E+05	1.43E+06	-96	2.09E+05	112
L4	3.25E+05	1.43E+06	-96	2.09E+05	112
NF	—	—	—	—	—
NS	1.08E+05	1.17E+06	-89	2.59E+05	156

Table G–1430. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.86E+06	2.86E+06	-2.87E+06	2.79E+06
A2	-1.06E+06	2.15E+06	-1.02E+06	2.11E+06
FD	-1.13E+06	2.18E+06	-1.10E+06	2.12E+06
L1	-2.83E+06	2.83E+06	-2.86E+06	2.81E+06
L3	-9.76E+05	1.86E+06	-9.67E+05	1.84E+06
L4	-9.76E+05	1.86E+06	-9.67E+05	1.84E+06
NF	—	—	—	—
NS	-1.07E+06	1.41E+06	-1.06E+06	1.40E+06

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–716. Time history of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1431. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
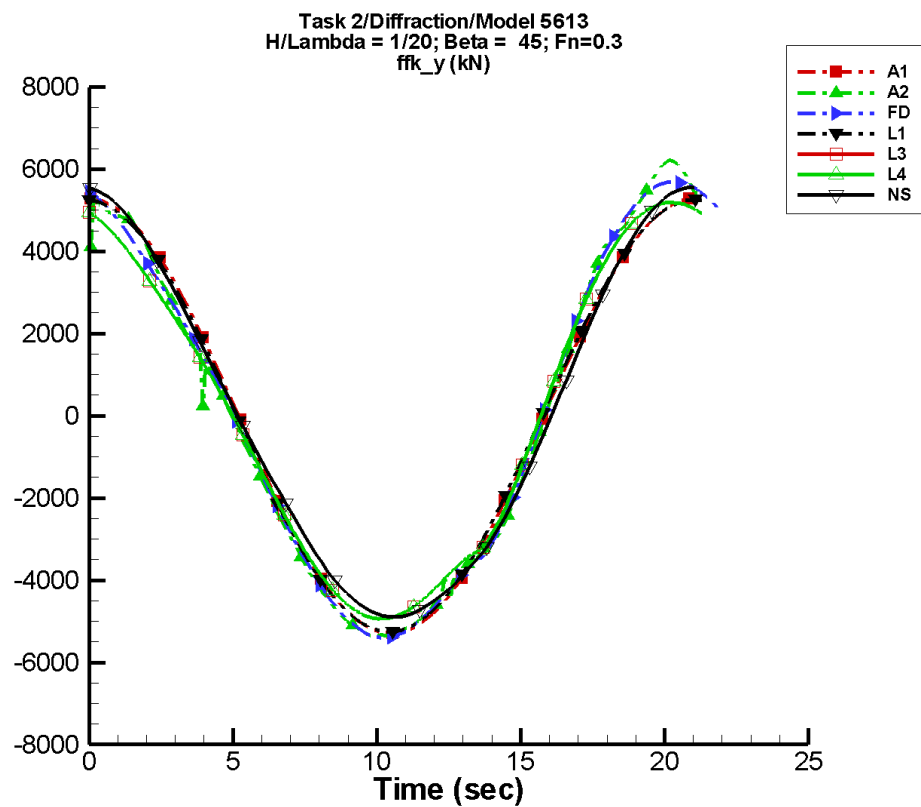
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.69E+03	4.29E+06	-96	2.58E+03	179
A2	1.46E+05	1.13E+06	-98	5.15E+05	-173
FD	2.17E+05	1.33E+06	-91	4.44E+05	-158
L1	224.	4.25E+06	-97	359.	118
L3	1.30E+05	9.08E+05	-95	4.38E+05	-160
L4	1.30E+05	9.08E+05	-95	4.38E+05	-160
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1432. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.28E+06	4.29E+06	-4.30E+06	4.18E+06
A2	-1.27E+06	1.88E+06	-1.22E+06	1.70E+06
FD	-1.34E+06	1.88E+06	-1.29E+06	1.74E+06
L1	-4.25E+06	4.25E+06	-4.28E+06	4.21E+06
L3	-1.02E+06	1.45E+06	-1.00E+06	1.39E+06
L4	-1.02E+06	1.45E+06	-1.00E+06	1.39E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–717. Time history of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
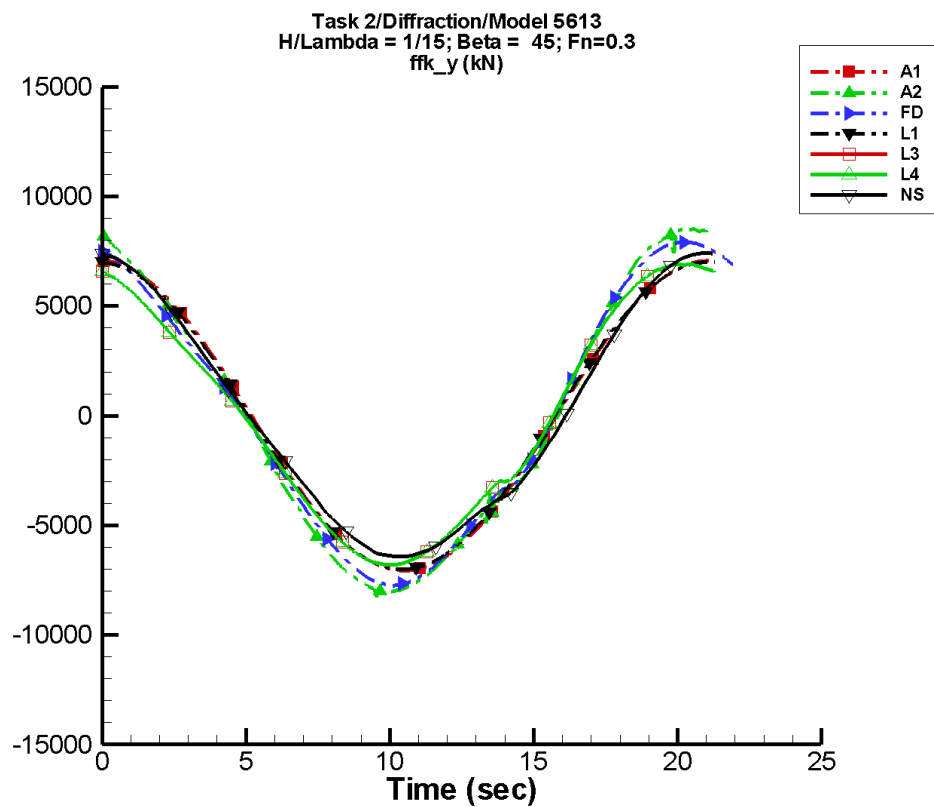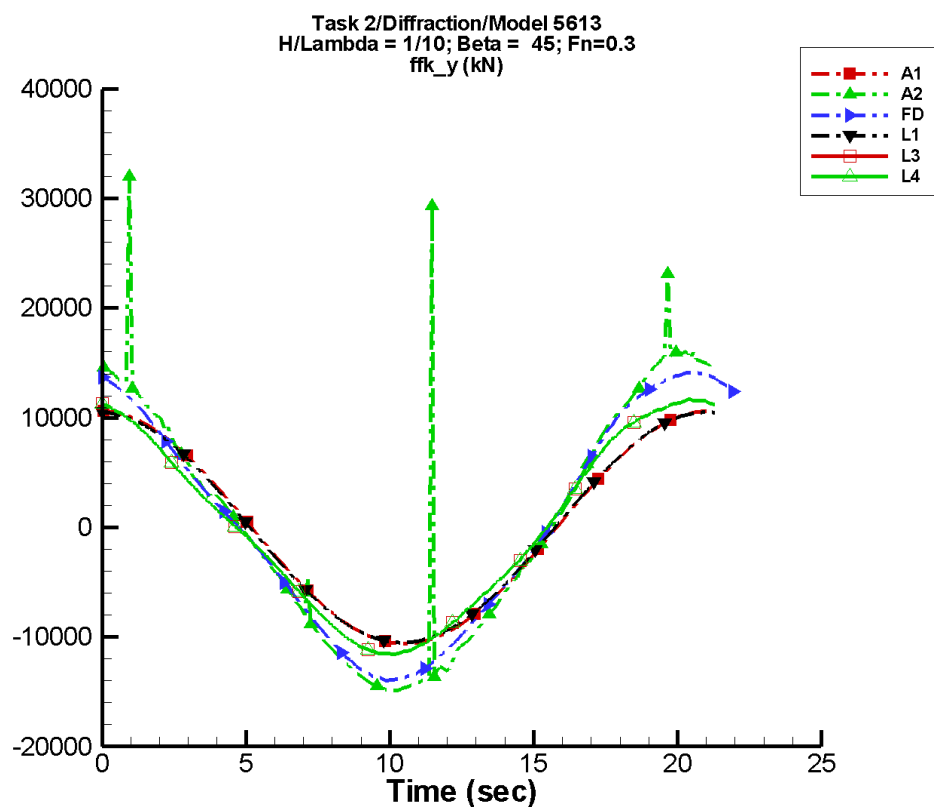
Table G–1433. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	617.	6.26E+05	-113	962.	150
A2	3.70E+04	5.68E+05	-114	4.29E+04	-68
FD	3.81E+04	5.66E+05	-137	3.74E+04	-120
L1	967.	6.24E+05	-121	1.08E+03	-130
L3	3.41E+04	5.59E+05	-116	3.50E+04	-81
L4	3.41E+04	5.59E+05	-116	3.50E+04	-81
NF	—	—	—	—	—
NS	1.44E+03	5.30E+05	-97	6.28E+03	-10

Table G–1434. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-6.26E+05	6.26E+05	-6.26E+05	6.06E+05
A2	-5.73E+05	6.00E+05	-5.68E+05	5.83E+05
FD	-5.67E+05	6.01E+05	-5.55E+05	5.82E+05
L1	-6.25E+05	6.25E+05	-6.18E+05	6.18E+05
L3	-5.72E+05	5.90E+05	-5.69E+05	5.83E+05
L4	-5.72E+05	5.90E+05	-5.69E+05	5.83E+05
NF	—	—	—	—
NS	-5.31E+05	5.32E+05	-5.32E+05	5.27E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–718. Time history of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
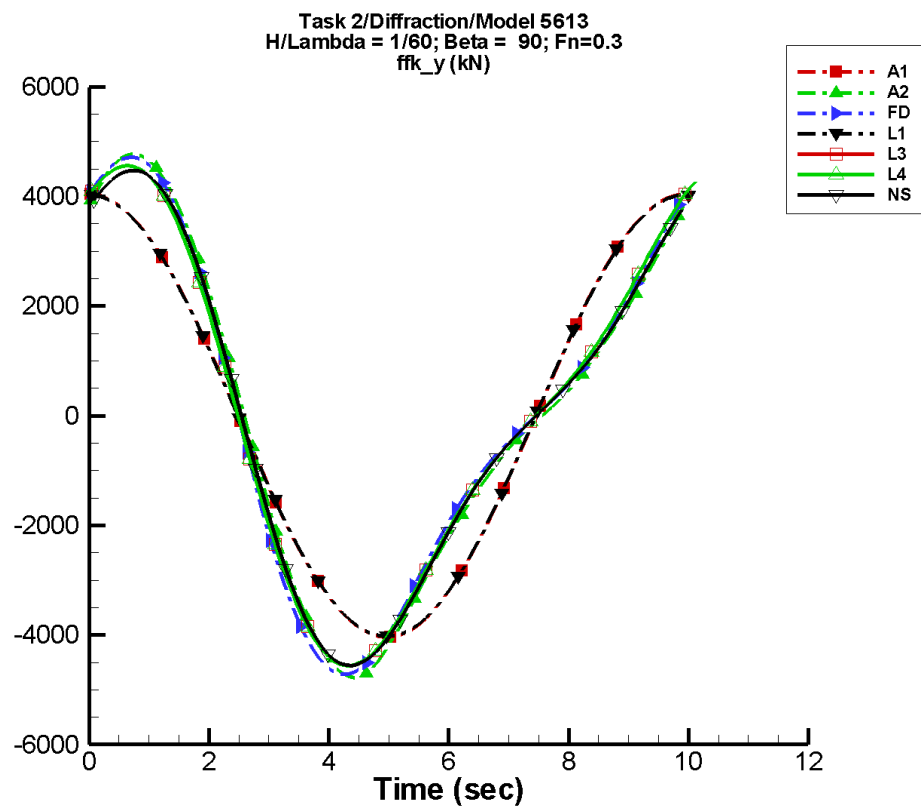
Table G–1435. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.85E+03	1.88E+06	-113	2.89E+03	150
A2	2.59E+05	1.32E+06	-111	1.69E+05	-21
FD	2.55E+05	1.34E+06	-134	1.81E+05	-74
L1	2.90E+03	1.87E+06	-121	3.23E+03	-130
L3	2.27E+05	1.24E+06	-112	1.50E+05	-32
L4	2.27E+05	1.24E+06	-112	1.50E+05	-32
NF	—	—	—	—	—
NS	1.14E+05	1.21E+06	-93	1.46E+05	20

Table G–1436. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.88E+06	1.88E+06	-1.88E+06	1.82E+06
A2	-1.18E+06	1.66E+06	-1.04E+06	1.61E+06
FD	-1.22E+06	1.67E+06	-1.07E+06	1.61E+06
L1	-1.87E+06	1.87E+06	-1.85E+06	1.85E+06
L3	-1.17E+06	1.53E+06	-1.08E+06	1.51E+06
L4	-1.17E+06	1.53E+06	-1.08E+06	1.51E+06
NF	—	—	—	—
NS	-1.20E+06	1.39E+06	-1.14E+06	1.37E+06

Data identically zero, insufficient, or not available from NFA.

Figure G–719. Time history of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
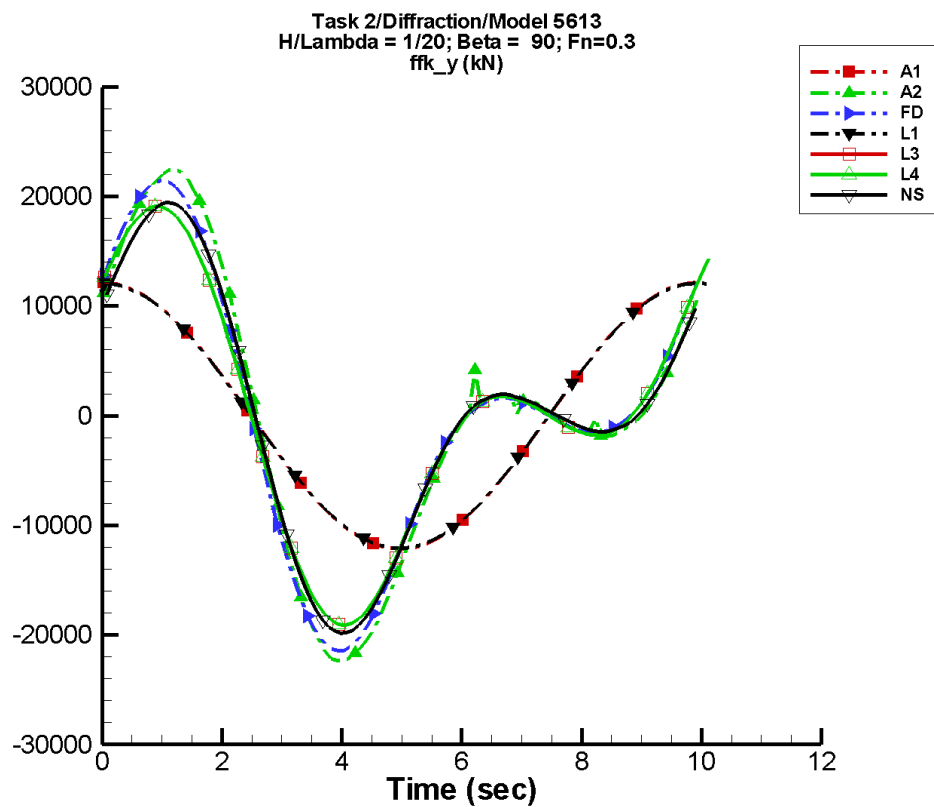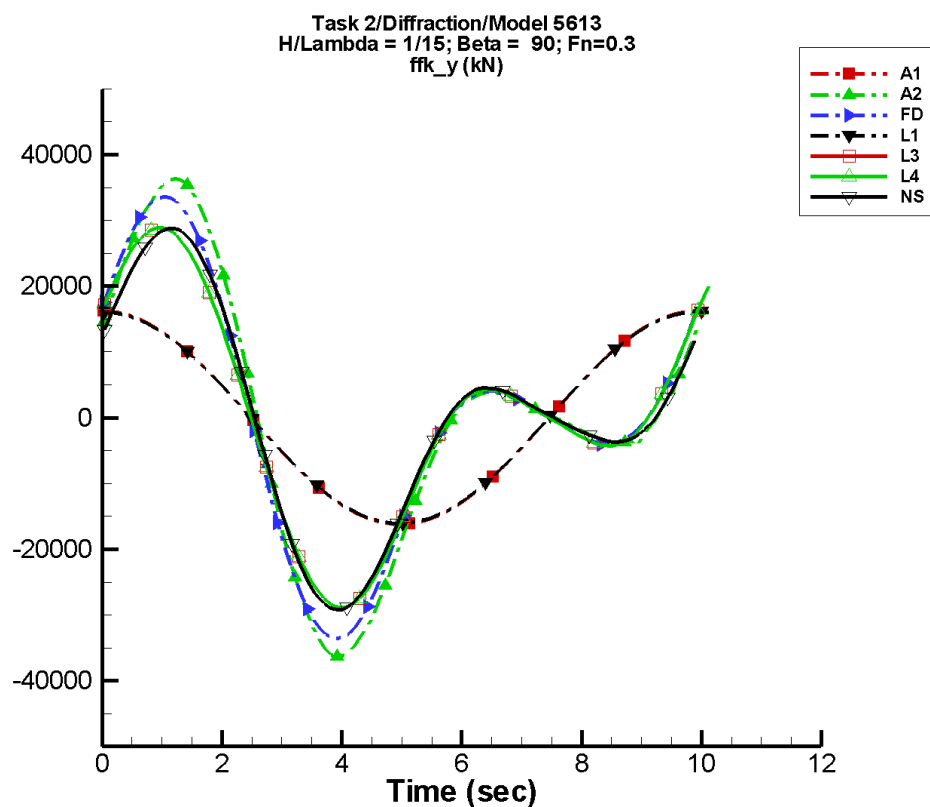
Table G–1437. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.48E+03	2.51E+06	-113	3.86E+03	150
A2	3.96E+05	1.46E+06	-114	1.56E+05	-23
FD	3.79E+05	1.51E+06	-136	1.82E+05	-71
L1	3.87E+03	2.50E+06	-121	4.30E+03	-130
L3	3.24E+05	1.32E+06	-113	1.45E+05	-31
L4	3.24E+05	1.32E+06	-113	1.45E+05	-31
NF	—	—	—	—	—
NS	1.09E+05	1.20E+06	-88	1.04E+05	66

Table G–1438. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.51E+06	2.51E+06	-2.51E+06	2.43E+06
A2	-1.00E+06	1.96E+06	-9.86E+05	1.90E+06
FD	-1.05E+06	2.00E+06	-1.04E+06	1.93E+06
L1	-2.50E+06	2.50E+06	-2.47E+06	2.47E+06
L3	-9.20E+05	1.73E+06	-9.16E+05	1.71E+06
L4	-9.20E+05	1.73E+06	-9.16E+05	1.71E+06
NF	—	—	—	—
NS	-9.72E+05	1.38E+06	-9.57E+05	1.37E+06

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–720. Time history of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
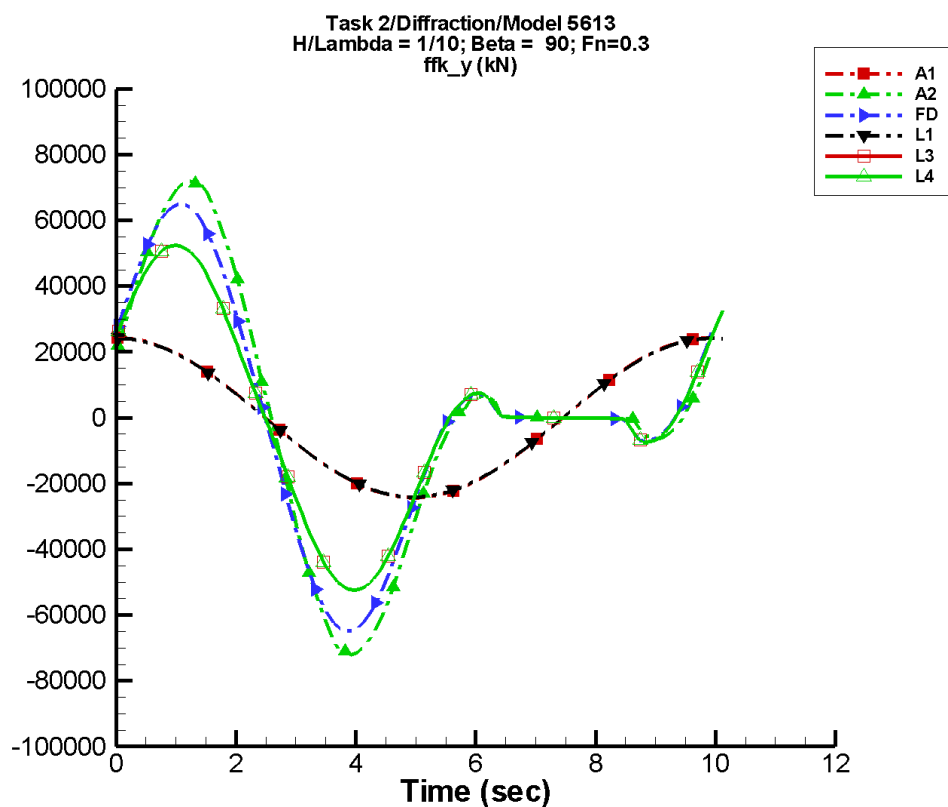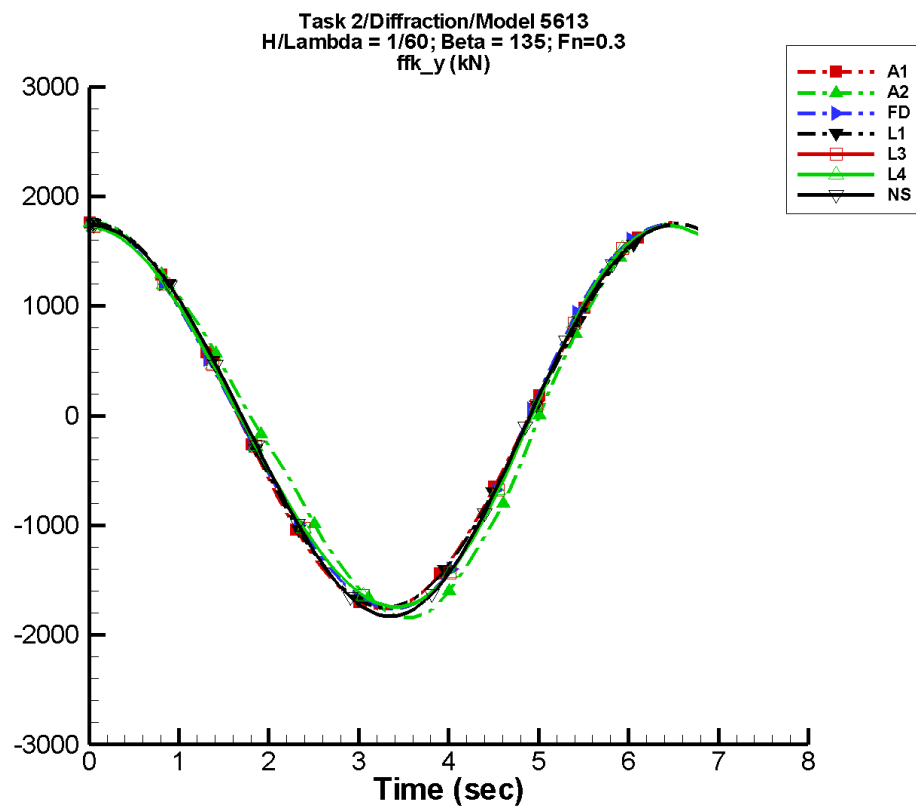
Table G–1439. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	3.71E+03	3.77E+06	-113	5.79E+03	150
A2	1.52E+05	1.12E+06	-103	2.86E+05	158
FD	2.18E+05	1.27E+06	-131	2.06E+05	125
L1	5.80E+03	3.75E+06	-121	6.46E+03	-130
L3	1.29E+05	8.66E+05	-105	2.67E+05	156
L4	1.29E+05	8.66E+05	-105	2.67E+05	156
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1440. Minimum and maximum of of M_y^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.77E+06	3.77E+06	-3.77E+06	3.65E+06
A2	-1.17E+06	1.68E+06	-1.16E+06	1.52E+06
FD	-1.19E+06	1.68E+06	-1.18E+06	1.53E+06
L1	-3.75E+06	3.75E+06	-3.71E+06	3.71E+06
L3	-9.13E+05	1.30E+06	-9.02E+05	1.19E+06
L4	-9.13E+05	1.30E+06	-9.02E+05	1.19E+06
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 0; Fn=0.0
ffk_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–721. Time history of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1441. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.67E-04	0.164	-128	2.19E-04	-173
A2	-5.69E-04	4.67E-04	50	4.19E-04	79
FD	-2.92E-04	6.08E-04	22	1.86E-04	5
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-3.25E-03	6.04E-03	-49	4.14E-03	-75

Table G–1442. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

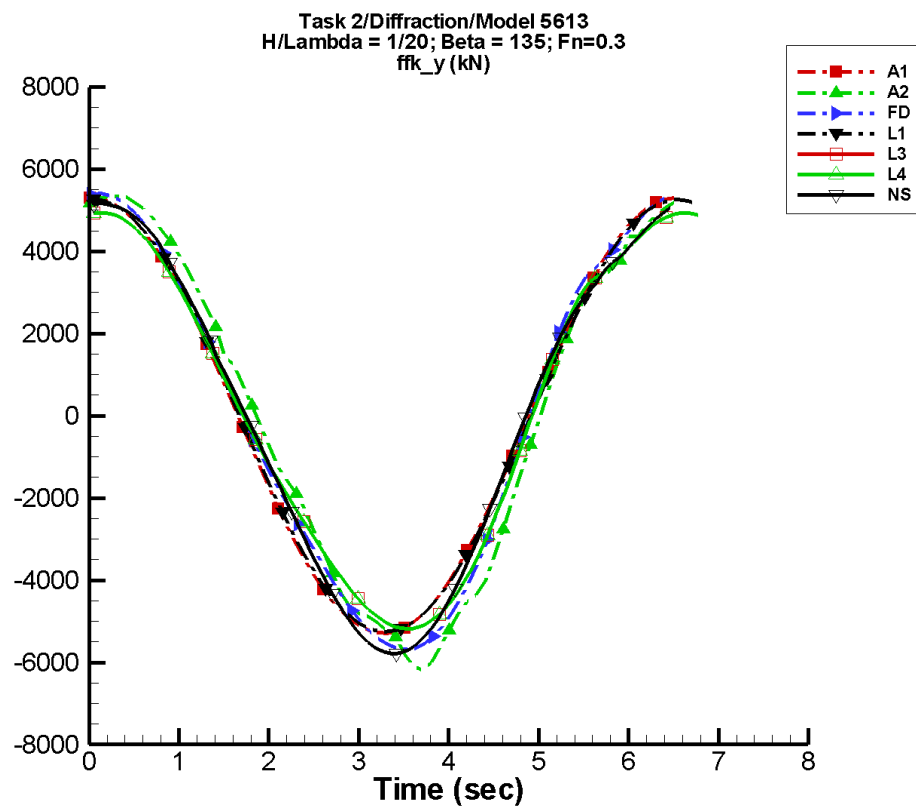| Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.164	0.164	-0.162	0.162
A2	-4.83E-03	1.71E-03	-2.05E-03	5.53E-04
FD	-6.14E-03	3.97E-03	-1.50E-03	1.53E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-4.40E-02	3.82E-02	-2.72E-02	8.85E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.0
ffk_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–722. Time history of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
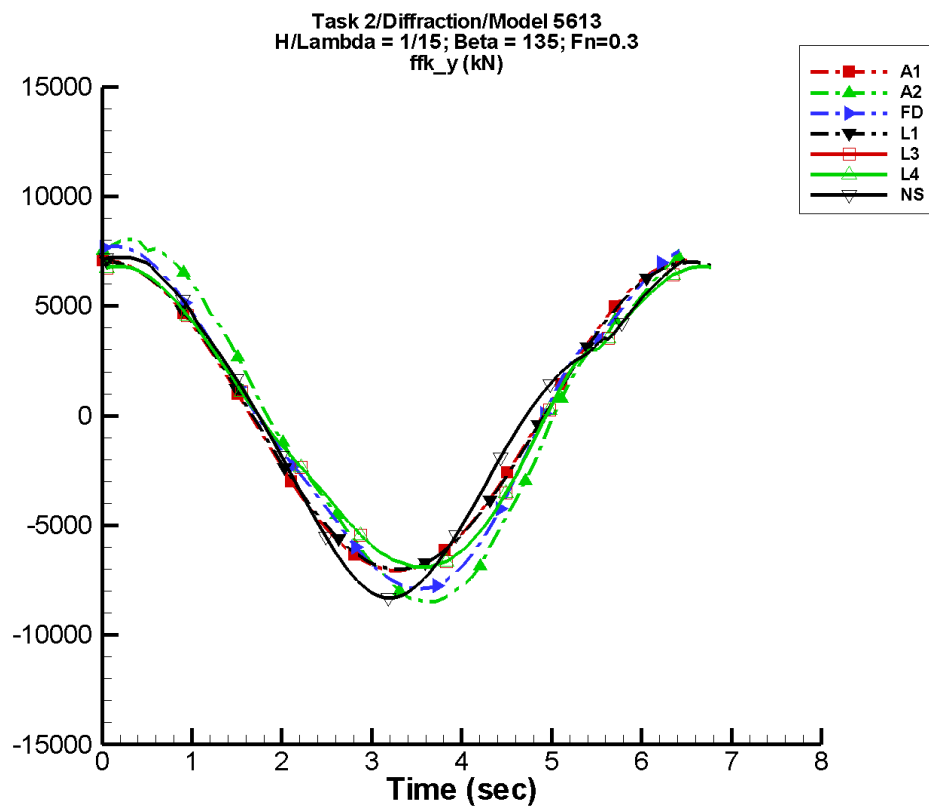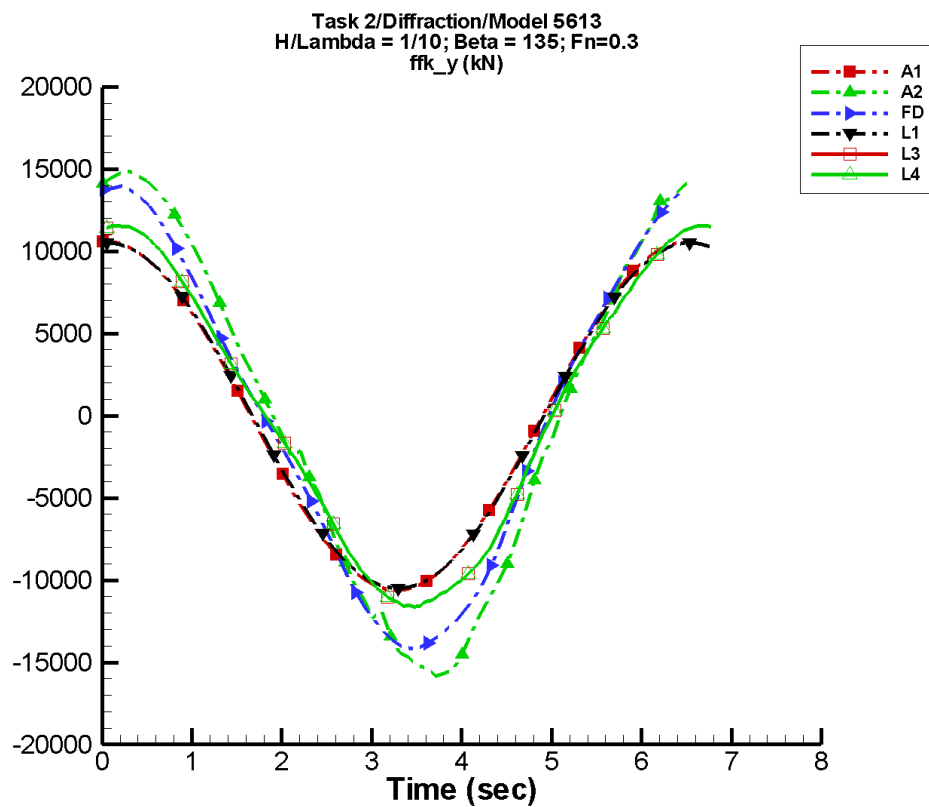
Table G–1443. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	5.01E-04	0.492	-128	6.59E-04	-173
A2	-2.97E+03	5.02E+03	154	3.70E+03	14
FD	1.15E-05	5.49E-04	-169	1.15E-04	-130
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.36E-03	7.61E-03	-154	1.70E-02	-163

Table G–1444. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.492	0.492	-0.487	0.487
A2	-2.46E+05	4.29E+03	-3.28E+04	2.82E+03
FD	-5.26E-03	5.92E-03	-2.75E-03	2.70E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.115	0.159	-4.43E-02	3.17E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 0; Fn=0.0
ffk_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–723. Time history of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
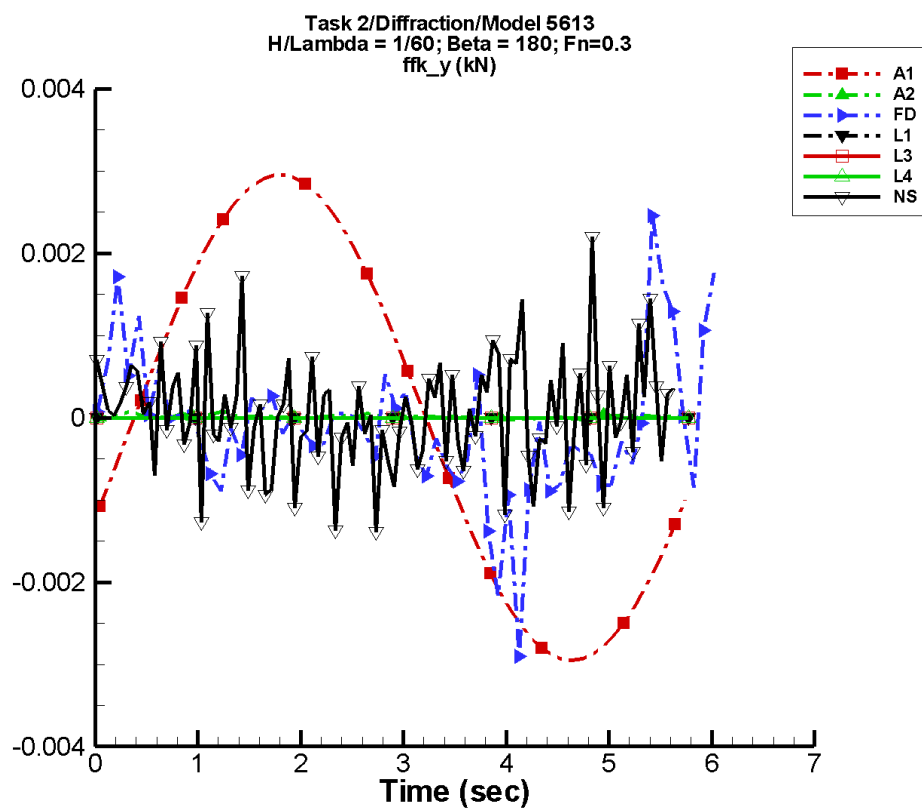
Table G–1445. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	6.69E-04	0.657	-128	8.80E-04	-173
A2	-355.	761.	-110	884.	-135
FD	8.91E-05	9.67E-04	-113	7.58E-04	0
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	9.17E-04	1.18E-02	48	1.79E-02	41

Table G–1446. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.657	0.657	-0.651	0.650
A2	-6.75E+04	4.56E-02	-9.01E+03	770.
FD	-6.45E-03	6.96E-03	-1.96E-03	3.19E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.206	0.184	-2.71E-02	6.51E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 0; Fn=0.0
ffk_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–724. Time history of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1447. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
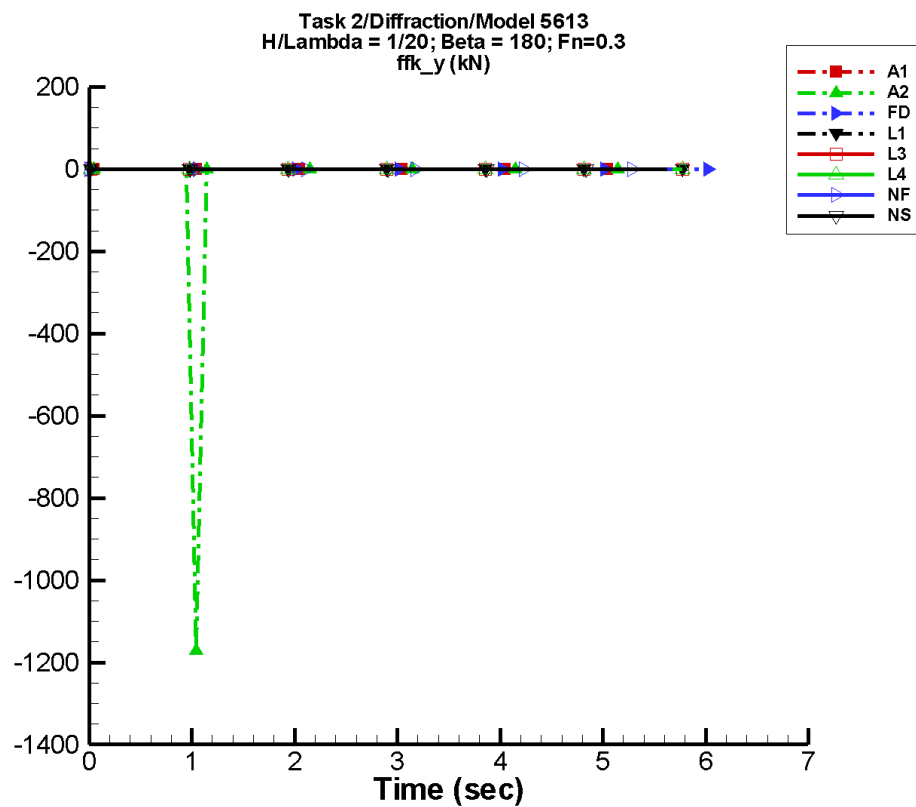
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.00E-03	0.986	-128	1.32E-03	-173
A2	168.	351.	121	447.	148
FD	-3.96E-04	1.41E-03	-43	7.84E-04	37
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1448. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.986	0.985	-0.976	0.975
A2	-6.30E+03	2.11E+04	-745.	3.05E+03
FD	-9.75E-03	1.01E-02	-3.46E-03	3.43E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–725. Time history of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
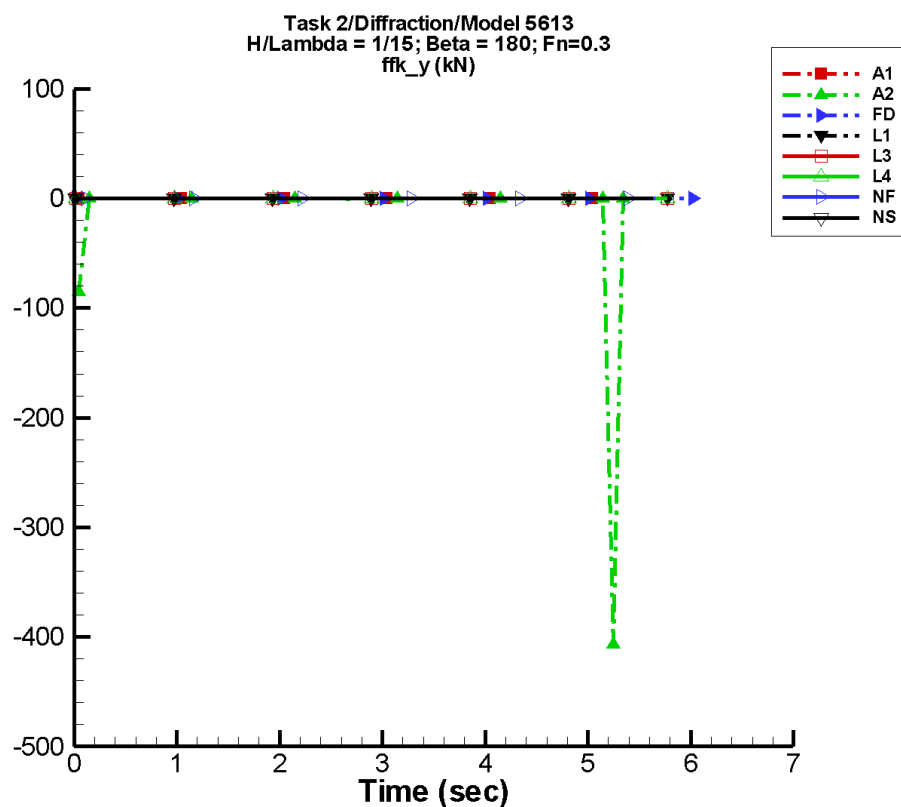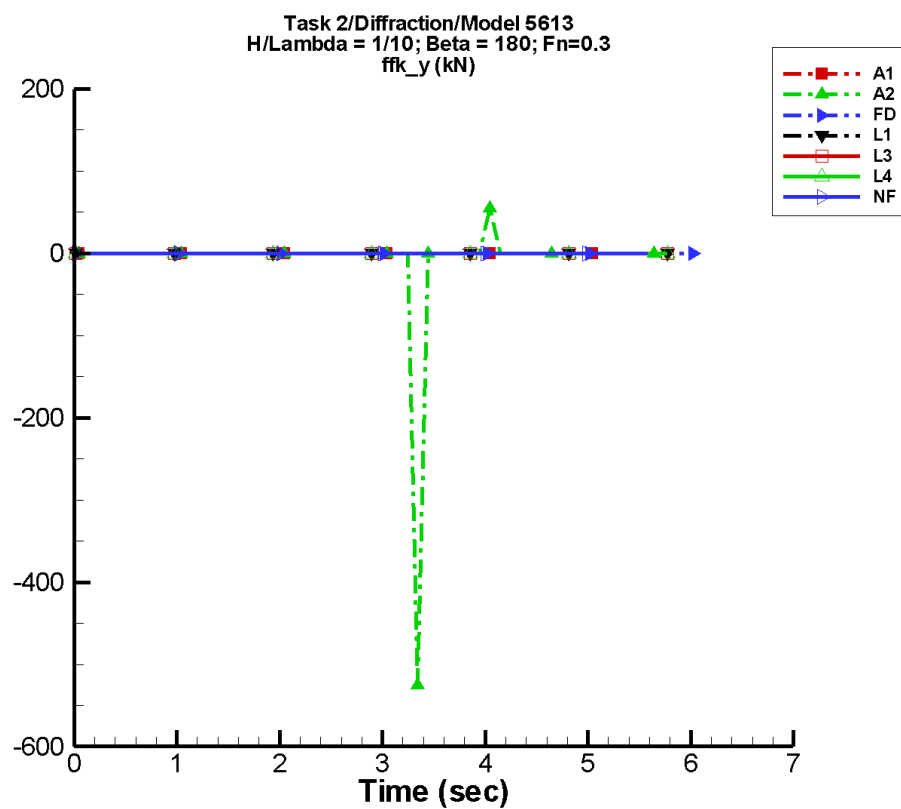
Table G–1449. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-37.4	6.33E+04	-7	58.3	-28
A2	39.6	6.48E+04	-11	1.03E+04	-76
FD	81.2	6.42E+04	-10	1.04E+04	-74
L1	35.9	6.31E+04	-7	54.7	29
L3	83.9	6.36E+04	-7	9.24E+03	-62
L4	83.9	6.36E+04	-7	9.24E+03	-62
NF	—	—	—	—	—
NS	-23.1	6.15E+04	-5	1.20E+04	-83

Table G–1450. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
	Minimum	Maximum	Minimum	Maximum
Code	(kN-m)	(kN-m)	(kN-m)	(kN-m)
A1	-6.33E+04	6.32E+04	-6.26E+04	6.26E+04
A2	-5.97E+04	7.15E+04	-5.85E+04	7.10E+04
FD	-5.86E+04	7.27E+04	-5.81E+04	7.17E+04
L1	-6.31E+04	6.31E+04	-6.29E+04	6.29E+04
L3	-5.92E+04	7.07E+04	-5.90E+04	7.03E+04
L4	-5.92E+04	7.07E+04	-5.90E+04	7.03E+04
NF	—	—	—	—
NS	-5.12E+04	7.30E+04	-5.09E+04	7.31E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 45; Fn=0.0
ffk_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–726. Time history of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
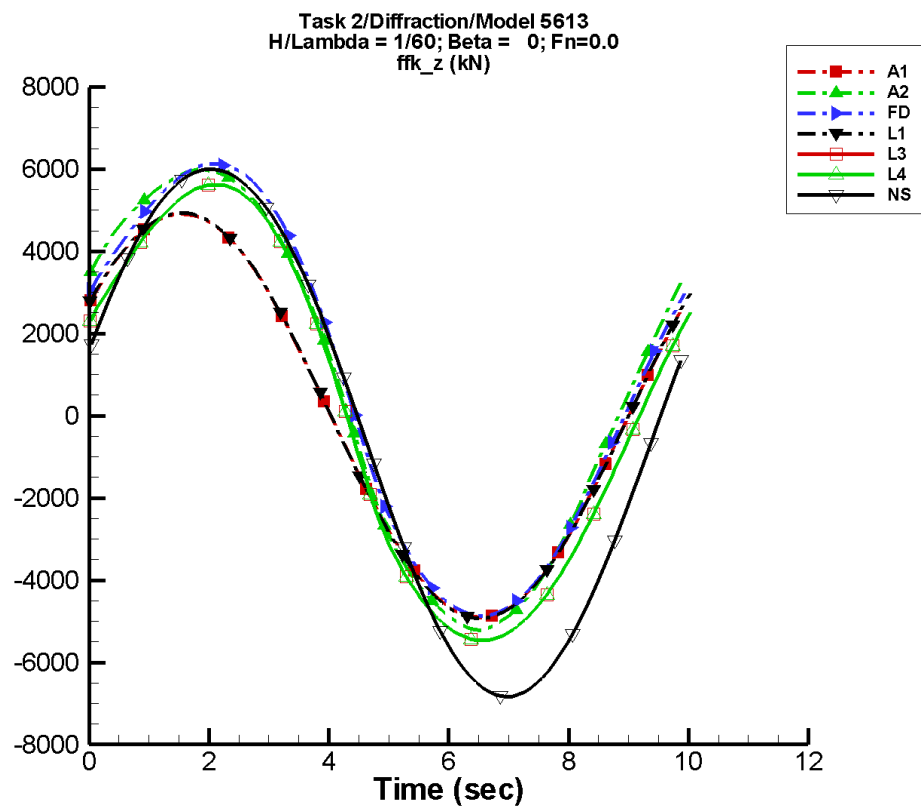
Table G–1451. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-112.	1.90E+05	-7	175.	-28
A2	-189.	2.27E+05	-8	8.86E+04	-79
FD	1.38E+03	2.21E+05	-8	8.68E+04	-84
L1	107.	1.89E+05	-7	164.	29
L3	651.	2.04E+05	-4	7.62E+04	-76
L4	651.	2.04E+05	-4	7.62E+04	-76
NF	—	—	—	—	—
NS	-203.	1.93E+05	-5	1.02E+05	-87

Table G–1452. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.90E+05	1.90E+05	-1.88E+05	1.88E+05
A2	-2.18E+05	5.61E+05	-2.10E+05	2.94E+05
FD	-2.07E+05	2.91E+05	-2.03E+05	2.86E+05
L1	-1.89E+05	1.89E+05	-1.89E+05	1.89E+05
L3	-1.88E+05	2.65E+05	-1.87E+05	2.63E+05
L4	-1.88E+05	2.65E+05	-1.87E+05	2.63E+05
NF	—	—	—	—
NS	-1.76E+05	2.84E+05	-1.72E+05	2.85E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–727. Time history of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
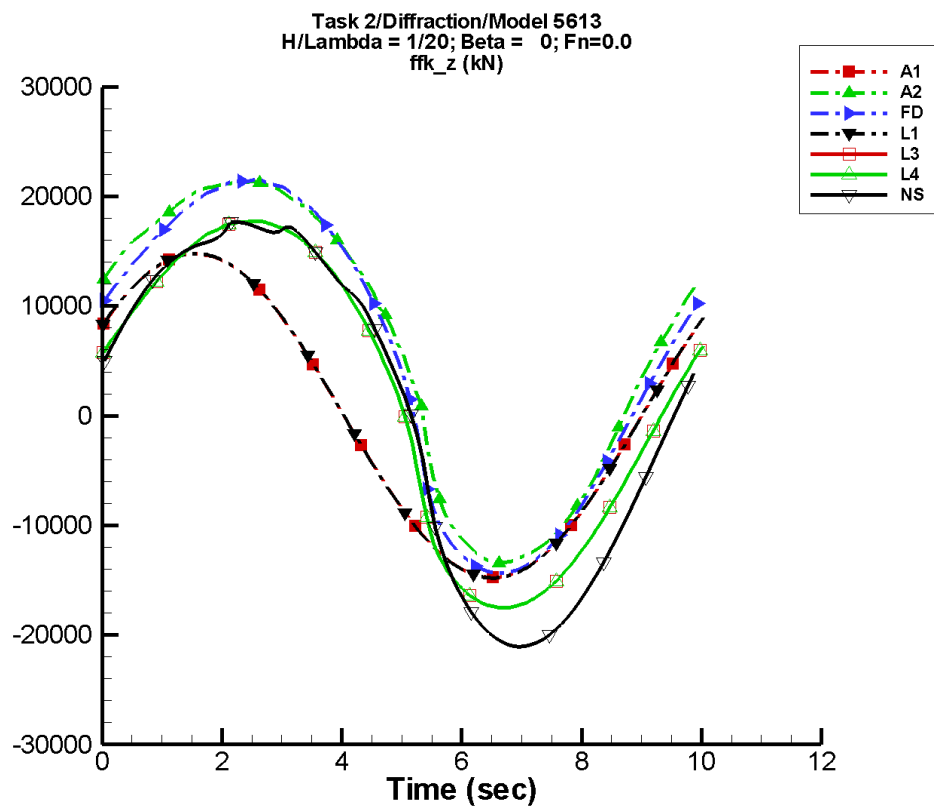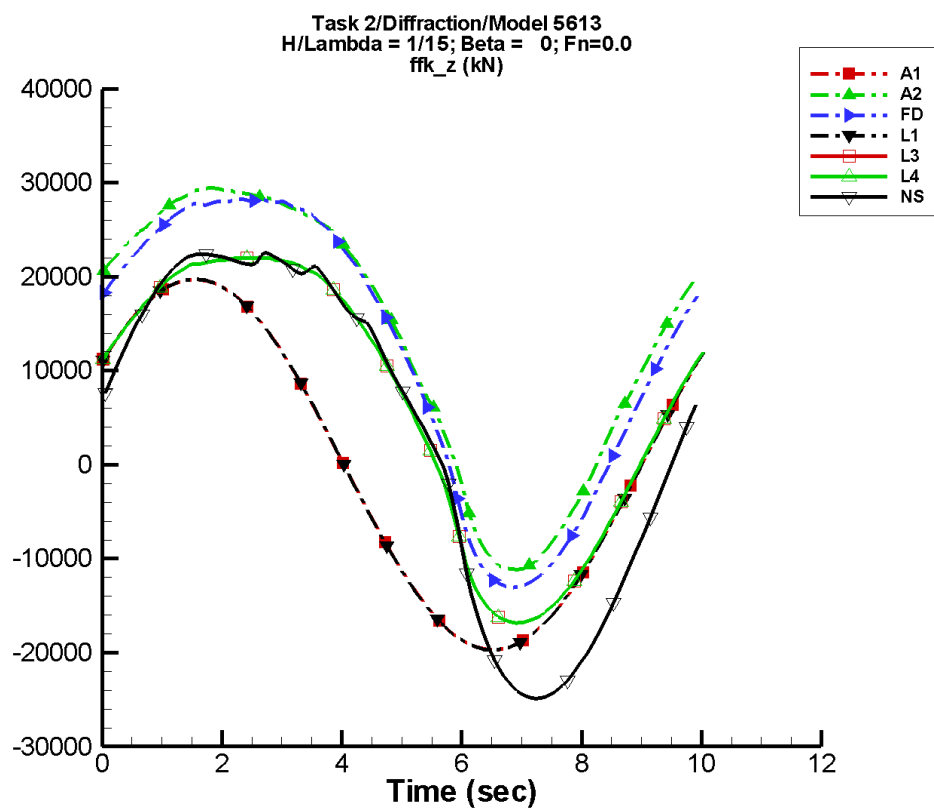
Table G–1453. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-150.	2.54E+05	-7	234.	-28
A2	1.36E+03	3.39E+05	-9	1.54E+05	-82
FD	2.80E+03	3.22E+05	-7	1.44E+05	-86
L1	143.	2.52E+05	-7	219.	29
L3	683.	2.88E+05	-4	1.22E+05	-78
L4	683.	2.88E+05	-4	1.22E+05	-78
NF	—	—	—	—	—
NS	-61.1	2.43E+05	-5	1.79E+05	-98

Table G–1454. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.54E+05	2.54E+05	-2.51E+05	2.51E+05
A2	-3.40E+05	4.66E+05	-3.29E+05	4.45E+05
FD	-3.12E+05	4.38E+05	-3.05E+05	4.31E+05
L1	-2.52E+05	2.52E+05	-2.51E+05	2.51E+05
L3	-2.73E+05	3.86E+05	-2.71E+05	3.84E+05
L4	-2.73E+05	3.86E+05	-2.71E+05	3.84E+05
NF	—	—	—	—
NS	-2.44E+05	4.12E+05	-2.39E+05	4.13E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–728. Time history of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
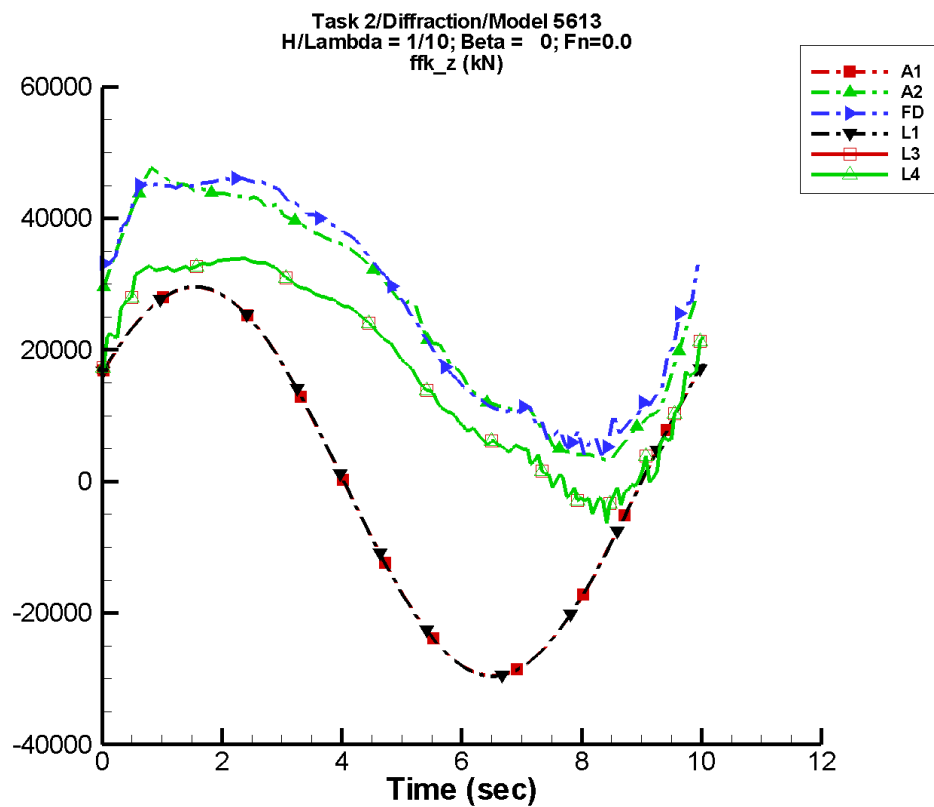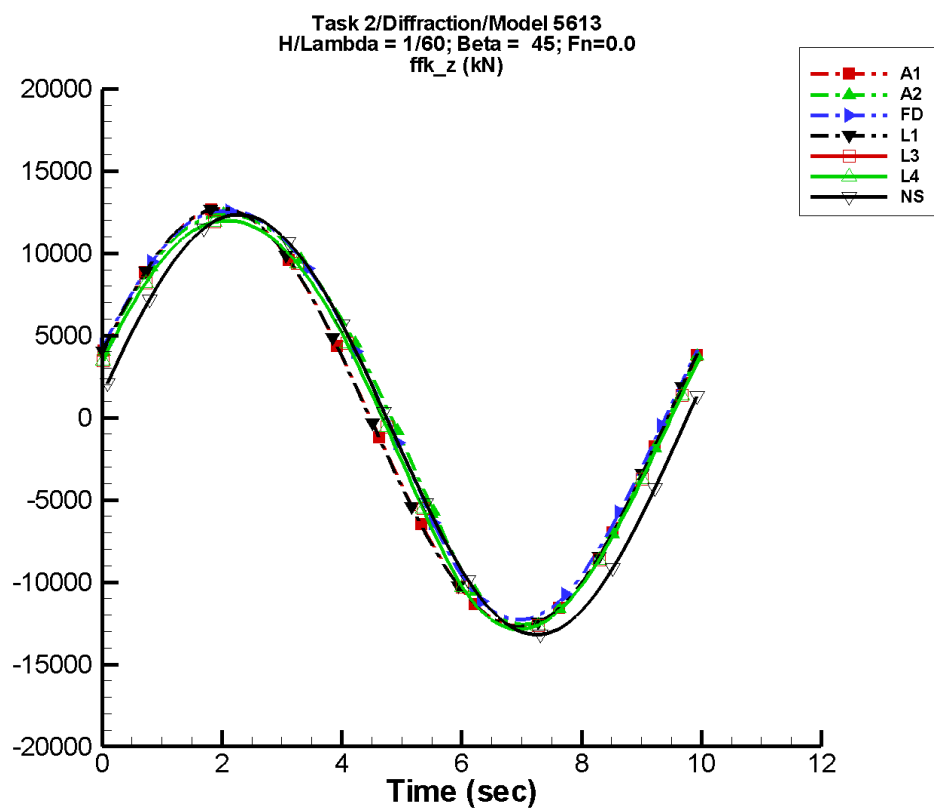
Table G–1455. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-225.	3.81E+05	-7	351.	-28
A2	2.12E+04	6.44E+05	-11	2.77E+05	-74
FD	4.52E+03	5.84E+05	-7	2.67E+05	-84
L1	215.	3.79E+05	-7	328.	29
L3	878.	4.90E+05	-3	2.12E+05	-77
L4	878.	4.90E+05	-3	2.12E+05	-77
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1456. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.81E+05	3.81E+05	-3.77E+05	3.77E+05
A2	-6.55E+05	1.53E+06	-6.37E+05	8.65E+05
FD	-5.65E+05	7.92E+05	-5.55E+05	7.81E+05
L1	-3.79E+05	3.79E+05	-3.77E+05	3.77E+05
L3	-4.61E+05	6.55E+05	-4.57E+05	6.52E+05
L4	-4.61E+05	6.55E+05	-4.57E+05	6.52E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.0
ffk_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–729. Time history of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1457. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	0.941	1.17E+03	-94	1.31	-156
A2	-30.8	4.92E+03	-99	8.60E+03	164
FD	44.3	2.59E+03	-101	9.41E+03	166
L1	0.274	1.07E+03	-94	0.432	151
L3	-5.21	2.26E+03	-95	9.51E+03	172
L4	-5.21	2.26E+03	-95	9.51E+03	172
NF	—	—	—	—	—
NS	-29.3	2.01E+03	88	3.33E+03	174

Table G–1458. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
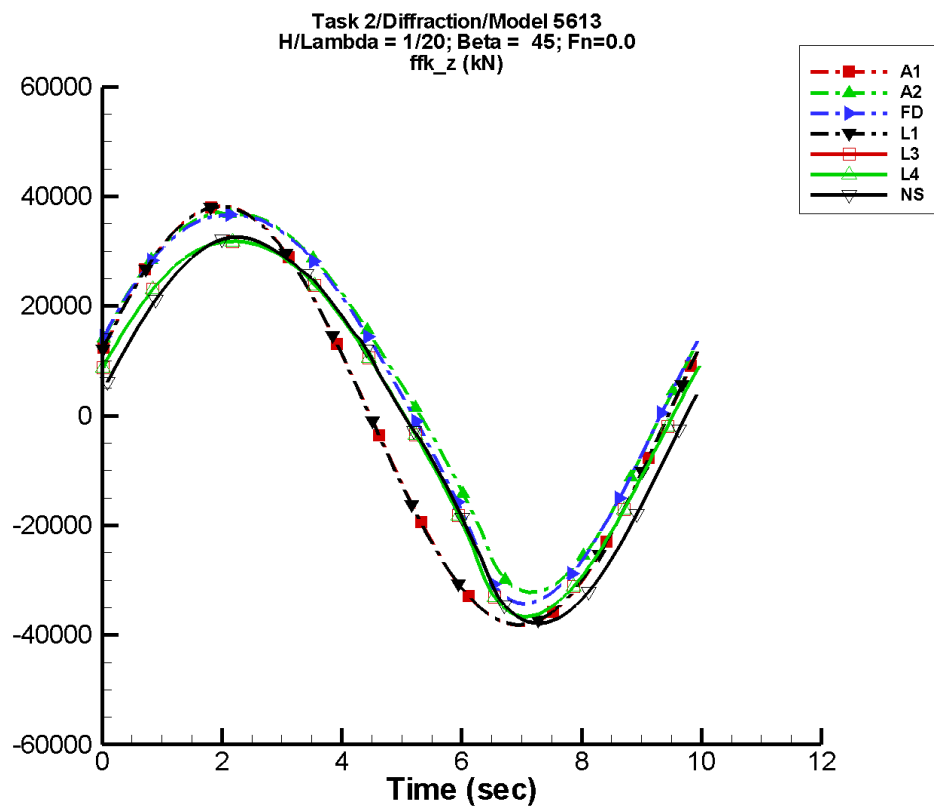
Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.17E+03	1.17E+03	-1.17E+03	1.16E+03
A2	-1.31E+04	1.30E+04	-1.21E+04	1.21E+04
FD	-1.20E+04	1.20E+04	-1.15E+04	1.15E+04
L1	-1.07E+03	1.07E+03	-1.08E+03	1.07E+03
L3	-1.17E+04	1.17E+04	-1.15E+04	1.15E+04
L4	-1.17E+04	1.17E+04	-1.15E+04	1.15E+04
NF	—	—	—	—
NS	-4.80E+03	4.82E+03	-4.65E+03	4.65E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.0
ffk_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–730. Time history of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
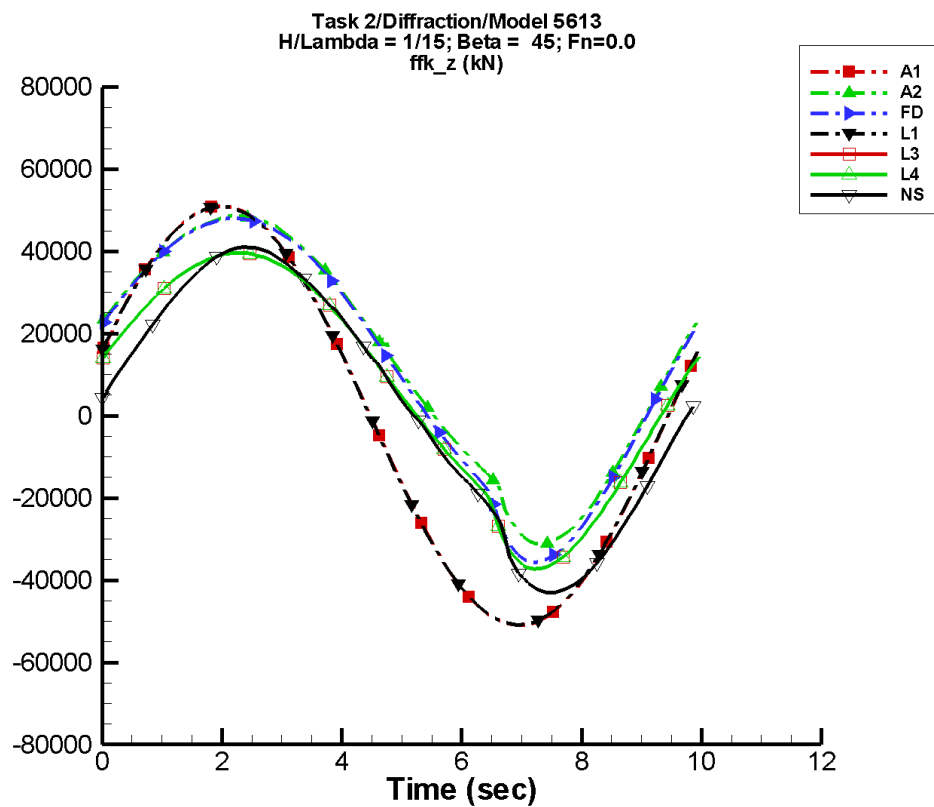
Table G–1459. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.83	3.52E+03	-94	3.95	-156
A2	-2.18E+03	4.28E+04	-97	7.91E+04	162
FD	949.	3.67E+04	-102	6.22E+04	167
L1	0.822	3.21E+03	-94	1.28	151
L3	12.8	3.24E+04	-96	5.89E+04	171
L4	12.8	3.24E+04	-96	5.89E+04	171
NF	—	—	—	—	—
NS	-969.	2.46E+03	-96	2.07E+04	171

Table G–1460. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.52E+03	3.52E+03	-3.52E+03	3.49E+03
A2	-1.99E+05	1.34E+05	-1.23E+05	1.22E+05
FD	-1.04E+05	1.04E+05	-1.00E+05	9.98E+04
L1	-3.21E+03	3.21E+03	-3.23E+03	3.20E+03
L3	-9.54E+04	9.54E+04	-9.39E+04	9.39E+04
L4	-9.54E+04	9.54E+04	-9.39E+04	9.39E+04
NF	—	—	—	—
NS	-2.92E+04	2.96E+04	-2.77E+04	2.82E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–731. Time history of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
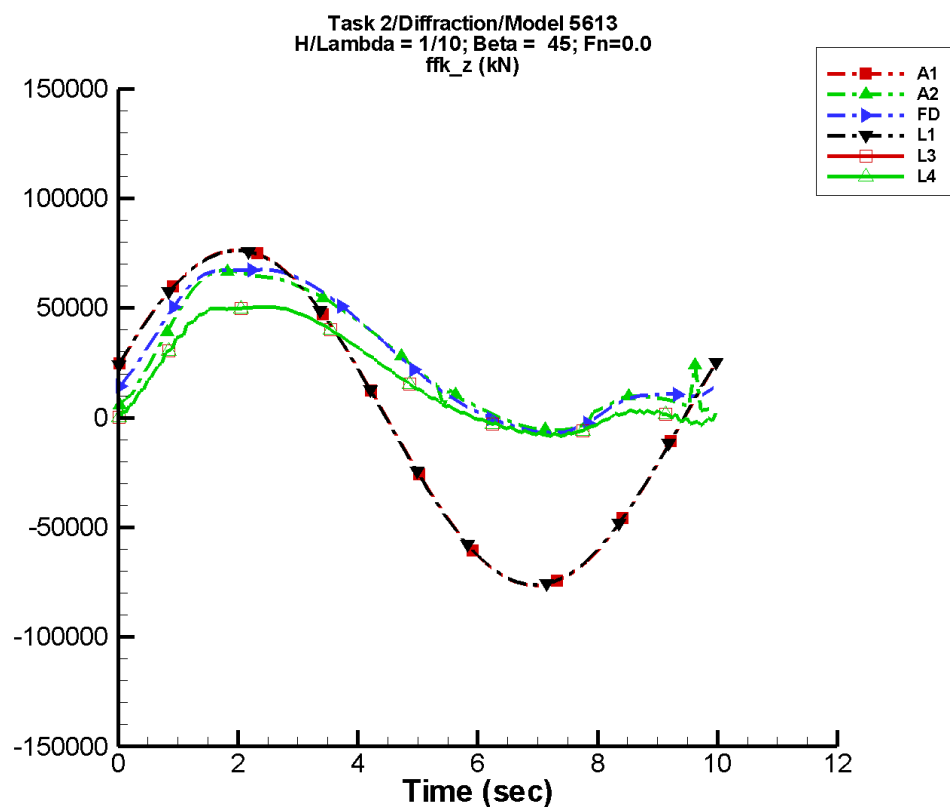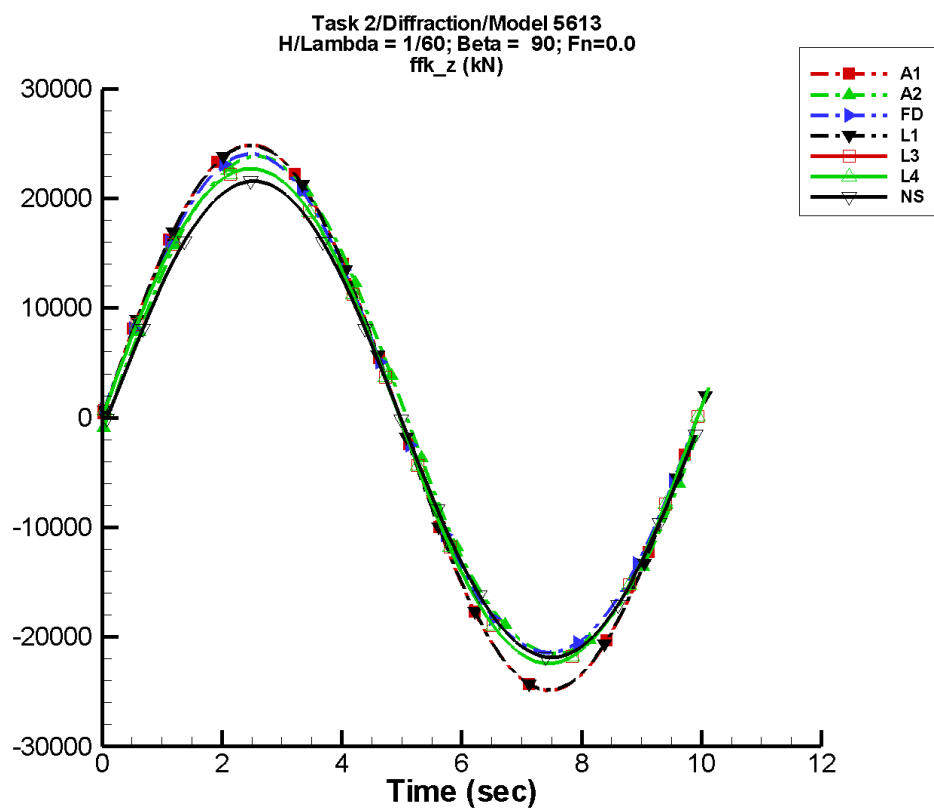
Table G–1461. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	3.78	4.70E+03	-94	5.27	-156
A2	-1.56E+03	9.23E+04	-100	1.12E+05	160
FD	2.01E+03	7.54E+04	-102	9.78E+04	168
L1	1.10	4.29E+03	-94	1.72	151
L3	61.5	6.68E+04	-96	8.80E+04	170
L4	61.5	6.68E+04	-96	8.80E+04	170
NF	—	—	—	—	—
NS	-1.29E+03	2.23E+04	87	1.71E+04	-2

Table G–1462. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-4.70E+03	4.70E+03	-4.70E+03	4.65E+03
A2	-2.18E+05	2.17E+05	-2.06E+05	2.06E+05
FD	-1.85E+05	1.85E+05	-1.77E+05	1.77E+05
L1	-4.29E+03	4.29E+03	-4.30E+03	4.27E+03
L3	-1.64E+05	1.64E+05	-1.61E+05	1.61E+05
L4	-1.64E+05	1.64E+05	-1.61E+05	1.61E+05
NF	—	—	—	—
NS	-3.70E+04	3.65E+04	-3.62E+04	3.56E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–732. Time history of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1463. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
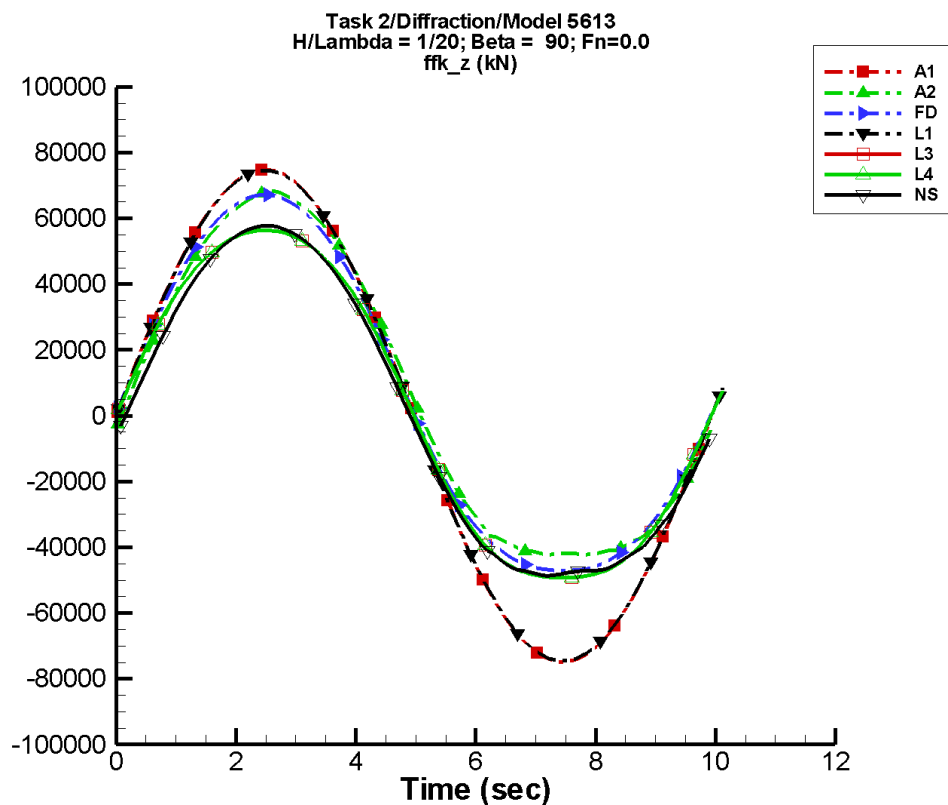
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	5.67	7.06E+03	-94	7.90	-156
A2	-1.16E+03	2.08E+05	-100	2.30E+05	162
FD	3.10E+03	1.76E+05	-101	1.86E+05	167
L1	1.65	6.43E+03	-94	2.56	151
L3	-1.42E+03	1.47E+05	-96	1.48E+05	171
L4	-1.42E+03	1.47E+05	-96	1.48E+05	171
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1464. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-7.06E+03	7.05E+03	-7.06E+03	6.98E+03
A2	-5.05E+05	5.06E+05	-4.67E+05	4.68E+05
FD	-4.14E+05	4.14E+05	-3.87E+05	3.87E+05
L1	-6.43E+03	6.43E+03	-6.45E+03	6.41E+03
L3	-3.45E+05	3.45E+05	-3.38E+05	3.38E+05
L4	-3.45E+05	3.45E+05	-3.38E+05	3.38E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–733. Time history of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
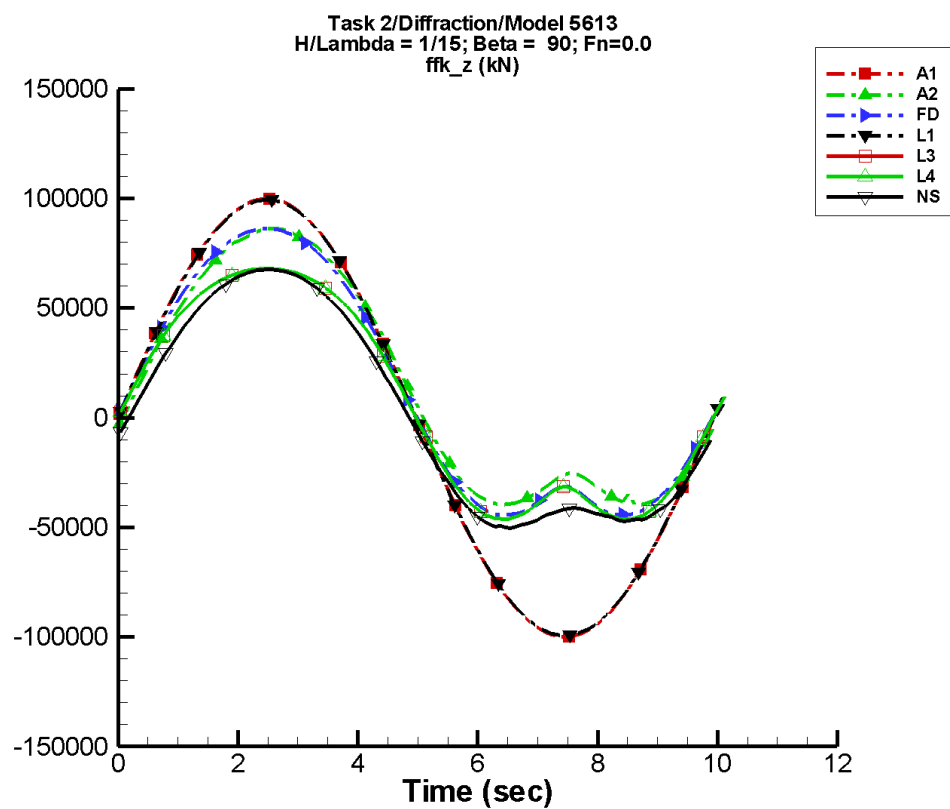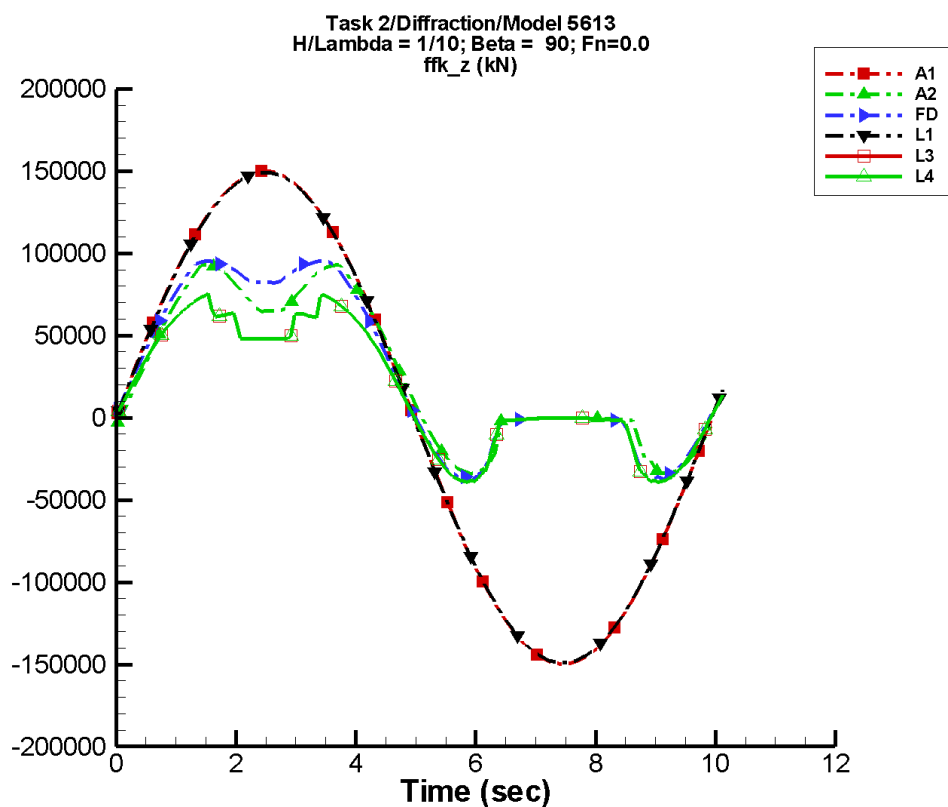
Table G–1465. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	42.5	6.33E+04	179	62.9	157
A2	2.72	6.48E+04	176	9.94E+03	46
FD	-11.3	6.44E+04	175	1.03E+04	43
L1	-5.04	6.31E+04	179	86.7	-176
L3	-43.7	6.37E+04	178	9.14E+03	45
L4	-43.7	6.37E+04	178	9.14E+03	45
NF	—	—	—	—	—
NS	-11.2	6.15E+04	-179	1.21E+04	70

Table G–1466. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-6.33E+04	6.32E+04	-6.26E+04	6.26E+04
A2	-7.16E+04	5.96E+04	-7.10E+04	5.85E+04
FD	-7.27E+04	5.86E+04	-7.17E+04	5.81E+04
L1	-6.31E+04	6.31E+04	-6.29E+04	6.29E+04
L3	-7.07E+04	5.92E+04	-7.03E+04	5.90E+04
L4	-7.07E+04	5.92E+04	-7.03E+04	5.90E+04
NF	—	—	—	—
NS	-7.29E+04	5.21E+04	-7.18E+04	5.17E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–734. Time history of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
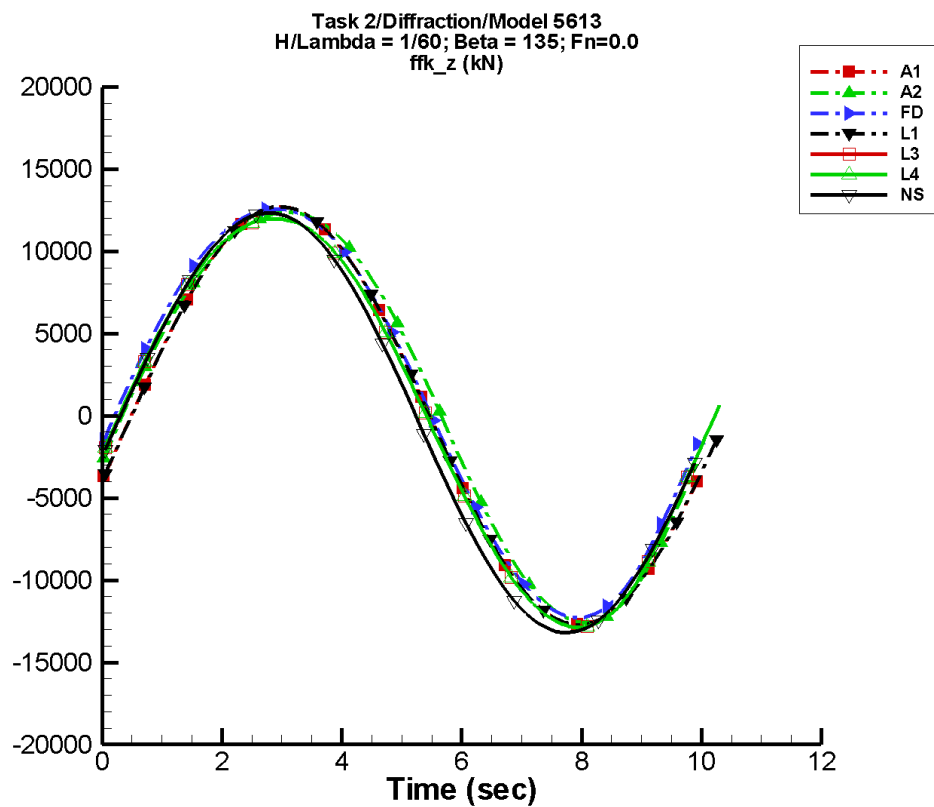
Table G–1467. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	128.	1.90E+05	179	189.	157
A2	-1.81E+03	2.31E+05	173	9.14E+04	51
FD	-603.	2.23E+05	173	8.53E+04	51
L1	-15.1	1.89E+05	179	260.	-176
L3	-385.	2.04E+05	177	7.72E+04	58
L4	-385.	2.04E+05	177	7.72E+04	58
NF	—	—	—	—	—
NS	-894.	1.93E+05	-179	1.02E+05	75

Table G–1468. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.90E+05	1.90E+05	-1.88E+05	1.88E+05
A2	-3.04E+05	2.17E+05	-2.98E+05	2.11E+05
FD	-2.91E+05	2.07E+05	-2.86E+05	2.03E+05
L1	-1.89E+05	1.89E+05	-1.89E+05	1.89E+05
L3	-2.65E+05	1.88E+05	-2.63E+05	1.87E+05
L4	-2.65E+05	1.88E+05	-2.63E+05	1.87E+05
NF	—	—	—	—
NS	-2.84E+05	1.83E+05	-2.78E+05	1.78E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–735. Time history of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
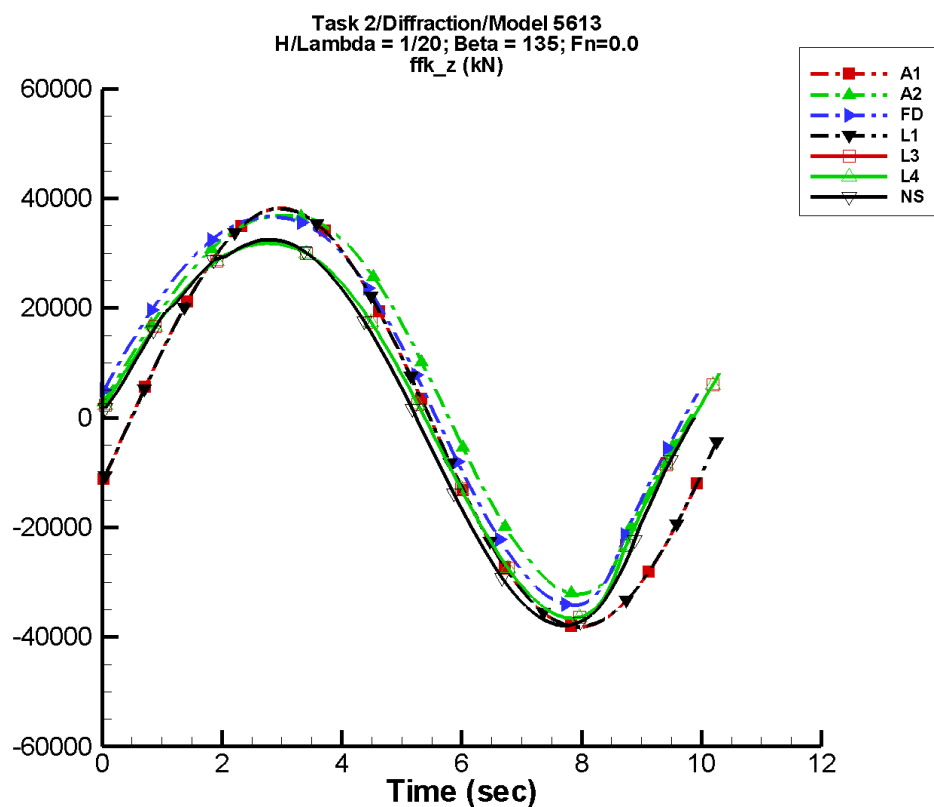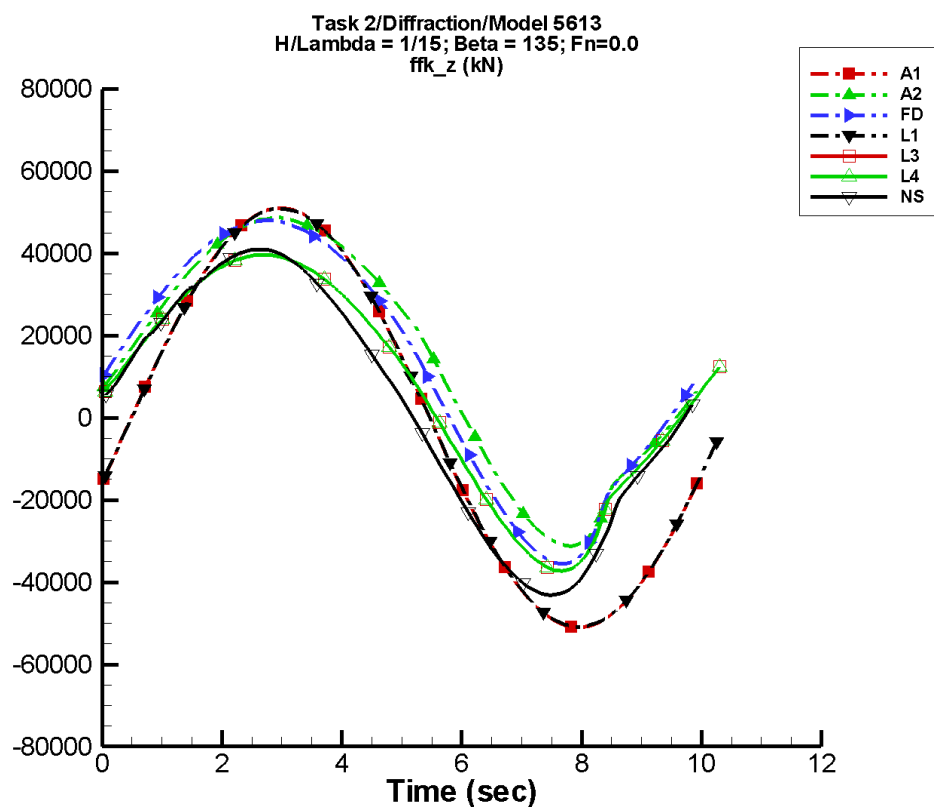
Table G–1469. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	171.	2.54E+05	179	253.	157
A2	-7.10E+03	3.47E+05	172	1.55E+05	52
FD	-1.63E+03	3.25E+05	173	1.43E+05	52
L1	-20.2	2.53E+05	179	347.	-176
L3	-480.	2.88E+05	176	1.26E+05	60
L4	-480.	2.88E+05	176	1.26E+05	60
NF	—	—	—	—	—
NS	-732.	2.41E+05	-177	1.77E+05	88

Table G–1470. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.54E+05	2.54E+05	-2.51E+05	2.51E+05
A2	-6.95E+05	3.41E+05	-4.88E+05	3.34E+05
FD	-4.38E+05	3.12E+05	-4.31E+05	3.05E+05
L1	-2.52E+05	2.52E+05	-2.51E+05	2.51E+05
L3	-3.86E+05	2.73E+05	-3.84E+05	2.71E+05
L4	-3.86E+05	2.73E+05	-3.84E+05	2.71E+05
NF	—	—	—	—
NS	-4.12E+05	2.52E+05	-4.07E+05	2.47E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–736. Time history of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
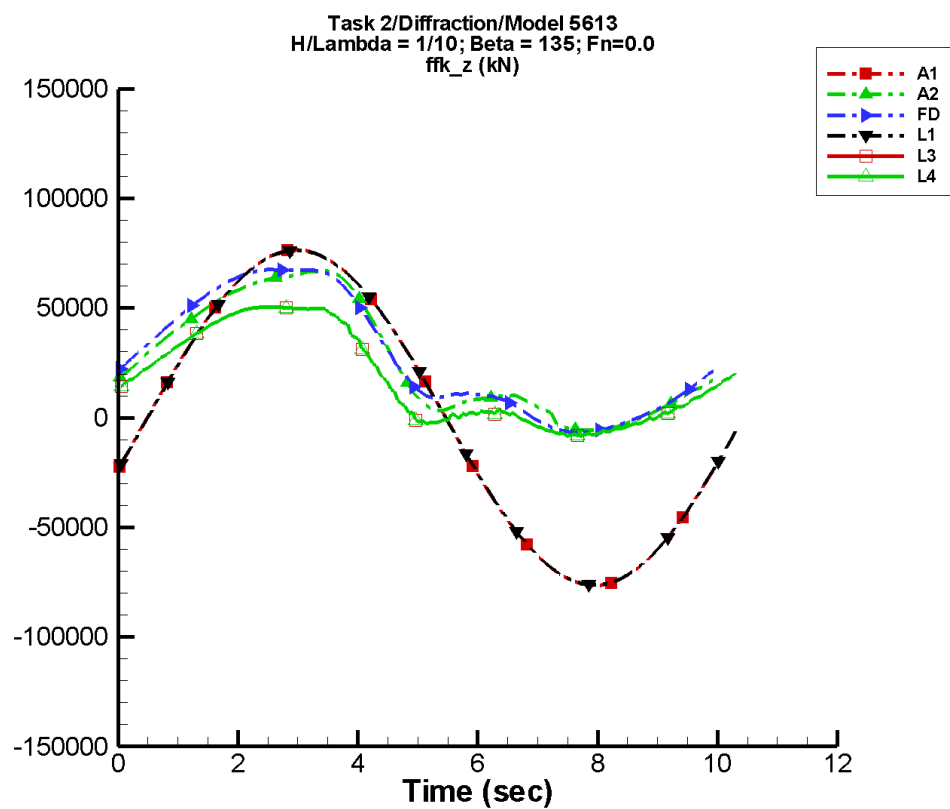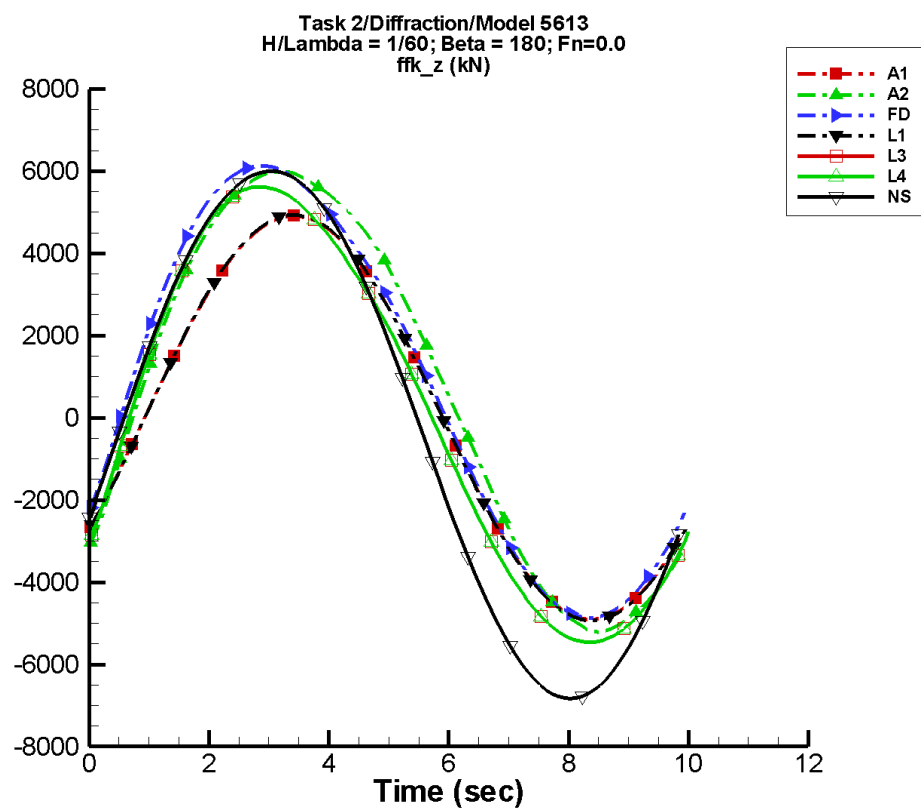
Table G–1471. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	256.	3.81E+05	179	379.	157
A2	-2.71E+03	6.56E+05	173	3.01E+05	50
FD	-2.47E+03	5.89E+05	173	2.66E+05	51
L1	-30.2	3.79E+05	179	520.	-176
L3	-853.	4.90E+05	176	2.16E+05	59
L4	-853.	4.90E+05	176	2.16E+05	59
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1472. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.81E+05	3.81E+05	-3.77E+05	3.77E+05
A2	-8.78E+05	6.53E+05	-8.68E+05	6.39E+05
FD	-7.92E+05	5.65E+05	-7.81E+05	5.55E+05
L1	-3.79E+05	3.79E+05	-3.77E+05	3.77E+05
L3	-6.55E+05	4.61E+05	-6.52E+05	4.58E+05
L4	-6.55E+05	4.61E+05	-6.52E+05	4.58E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 180; Fn=0.0
ffk_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–737. Time history of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1473. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-5.33E-05	0.164	119	1.17E-04	58
A2	-6.78E-04	6.32E-04	-82	5.59E-04	69
FD	-4.57E-04	2.02E-03	-45	1.13E-03	-74
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-3.31E-03	8.34E-03	52	1.33E-03	-143

Table G–1474. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

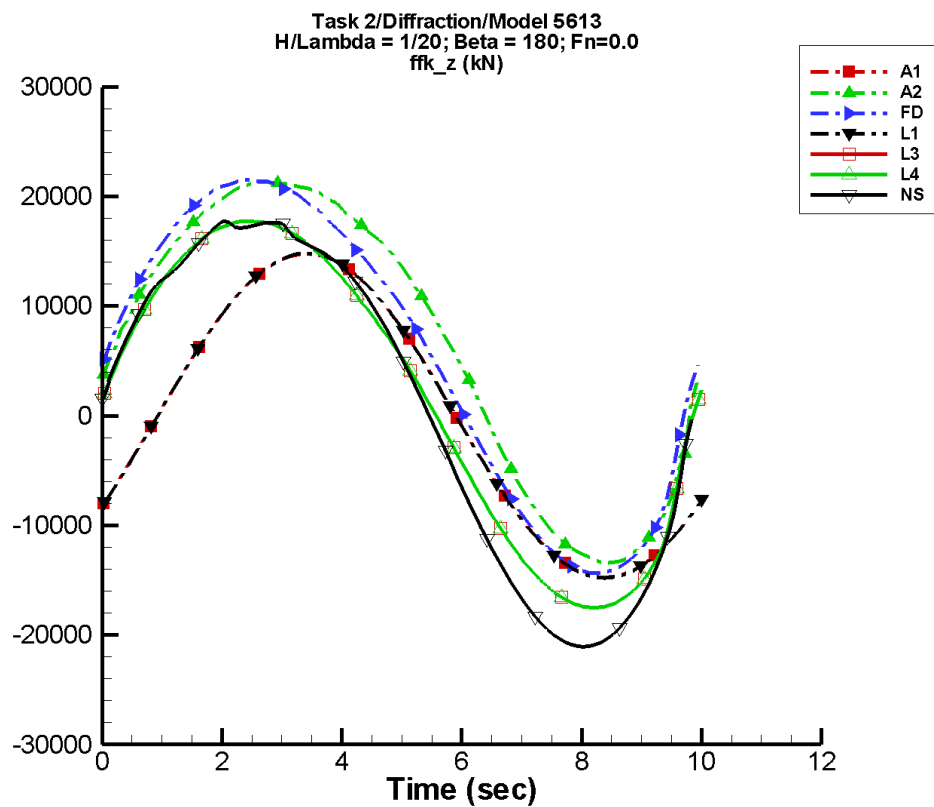| Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.164	0.164	-0.162	0.162
A2	-3.75E-03	1.43E-03	-2.52E-03	2.86E-04
FD	-1.49E-02	1.56E-02	-4.47E-03	3.44E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-6.68E-02	4.12E-02	-1.72E-02	1.20E-02

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–738. Time history of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
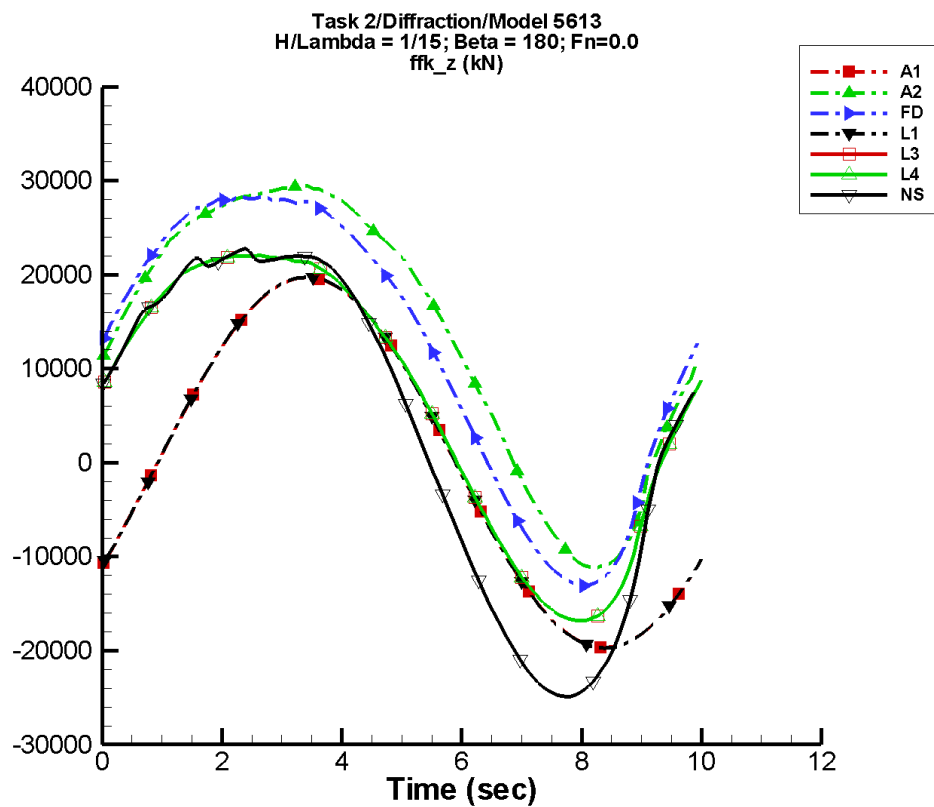
Table G–1475. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-1.60E-04	0.492	119	3.53E-04	58
A2	-4.02E+03	4.10E+03	-108	5.69E+03	-60
FD	-8.66E-03	1.93E-02	180	9.90E-03	106
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-7.01E-03	3.98E-03	-54	2.76E-03	-43

Table G–1476. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.492	0.492	-0.487	0.487
A2	-3.43E+05	1.07E-02	-4.56E+04	4.46E+03
FD	-0.110	2.86E-02	-4.12E-02	2.01E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.157	0.142	-2.87E-02	1.83E-02

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–739. Time history of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
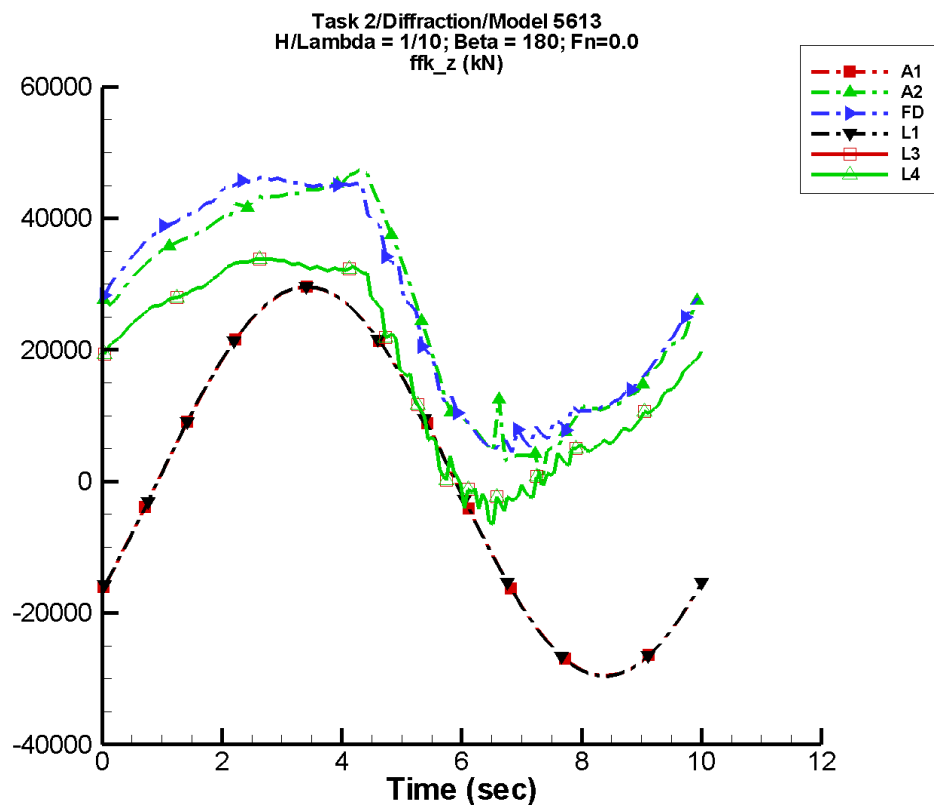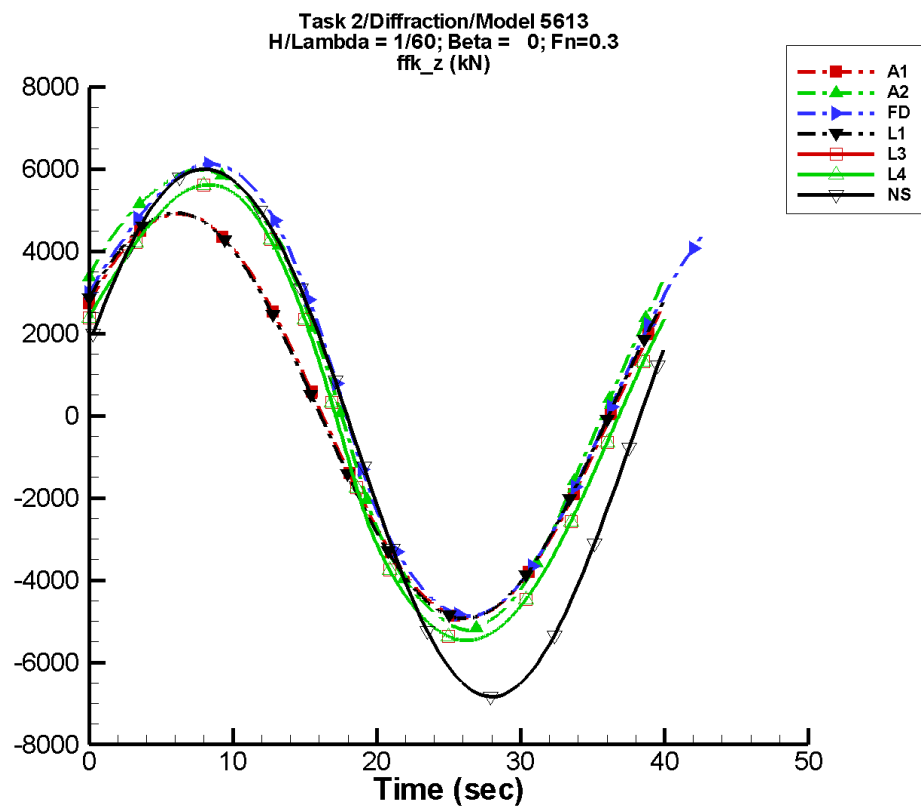
Table G–1477. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-2.14E-04	0.657	119	4.71E-04	58
A2	-305.	974.	-155	1.52E+03	172
FD	8.26E-04	7.82E-03	-32	1.18E-02	-95
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	5.18E-03	4.77E-03	-42	8.42E-03	-144

Table G–1478. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.657	0.657	-0.650	0.650
A2	-9.78E+04	1.76E+04	-1.30E+04	2.34E+03
FD	-4.87E-02	6.80E-02	-2.83E-02	3.35E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.222	0.200	-3.78E-02	3.84E-02

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–740. Time history of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1479. Coefficients of the Fourier fit $a_0 + a_1 \sin\left(\omega t + \Phi_1\right) + a_2 \sin\left(2\omega t + \Phi_2\right) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-3.21E-04	0.986	119	7.07E-04	58
A2	-221.	5.06E+03	93	9.36E+03	-153
FD	-1.52E-03	7.31E-03	-11	8.66E-03	-72
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1480. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.985	0.986	-0.975	0.976
A2	-5.16E+05	5.08E+05	-7.03E+04	6.93E+04
FD	-8.58E-02	0.134	-2.15E-02	2.56E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 0; Fn=0.3
ffk_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–741. Time history of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
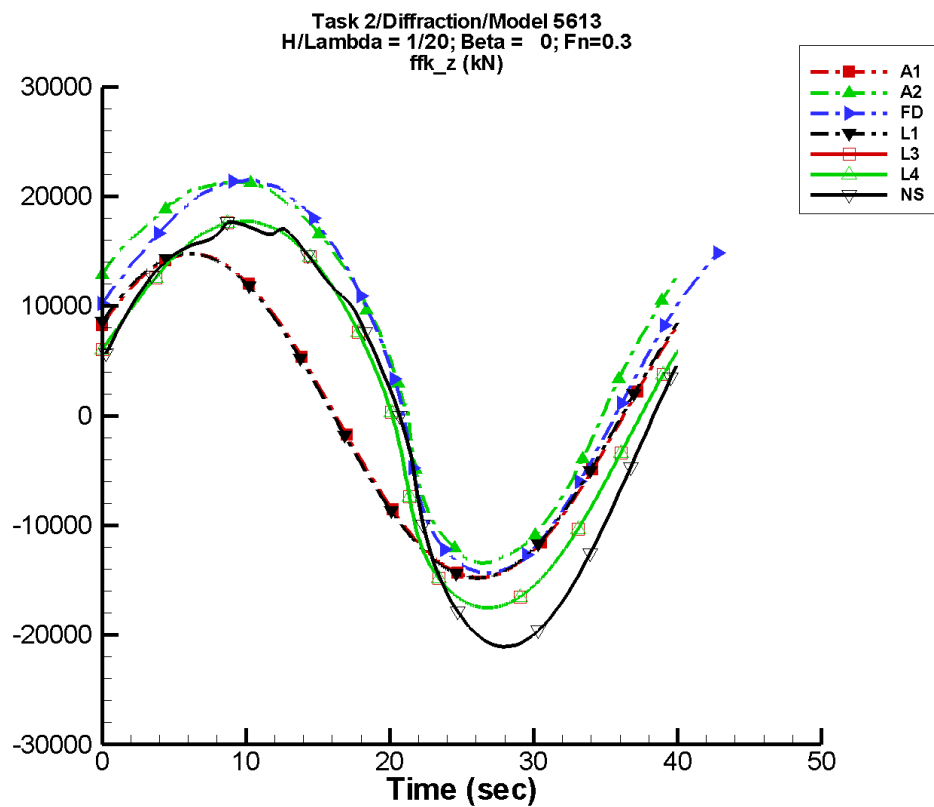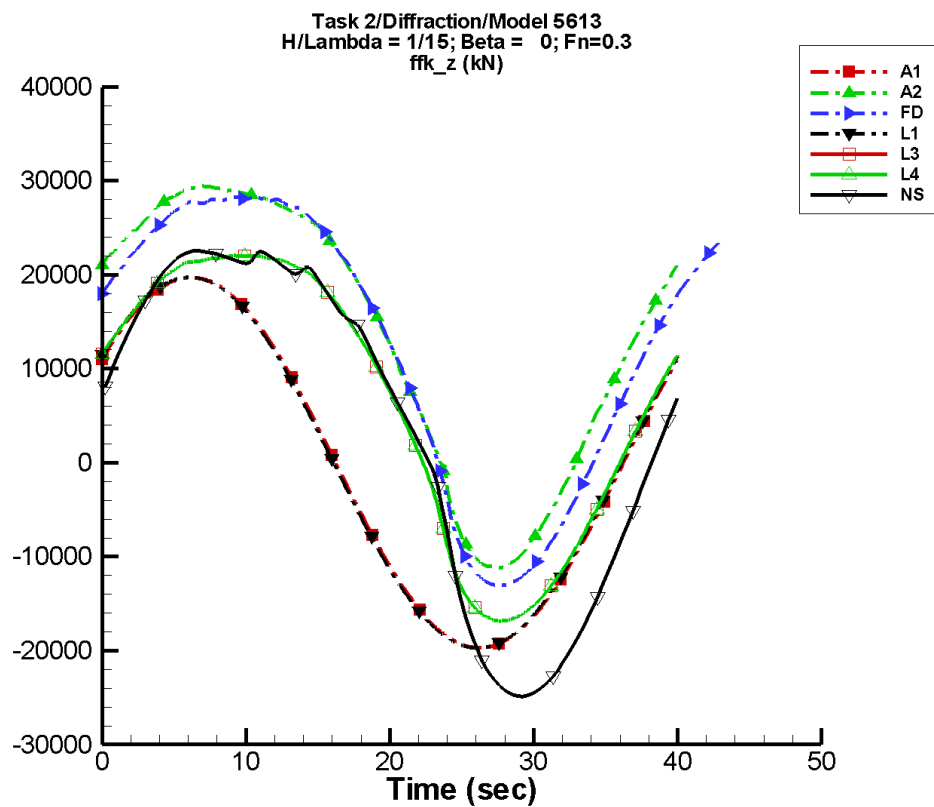
Table G–1481. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	4.64E-06	0.149	-109	6.60E-06	-170
A2	-6.23E-04	5.21E-04	64	3.91E-04	86
FD	-2.22E-04	1.43E-04	60	3.02E-04	-26
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.69E-03	7.64E-03	-64	3.34E-03	-56

Table G–1482. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.149	0.149	-0.149	0.149
A2	-4.42E-03	2.03E-03	-3.15E-03	1.09E-03
FD	-5.50E-03	7.50E-03	-2.05E-03	1.66E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-4.80E-02	3.29E-02	-2.44E-02	8.22E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–742. Time history of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
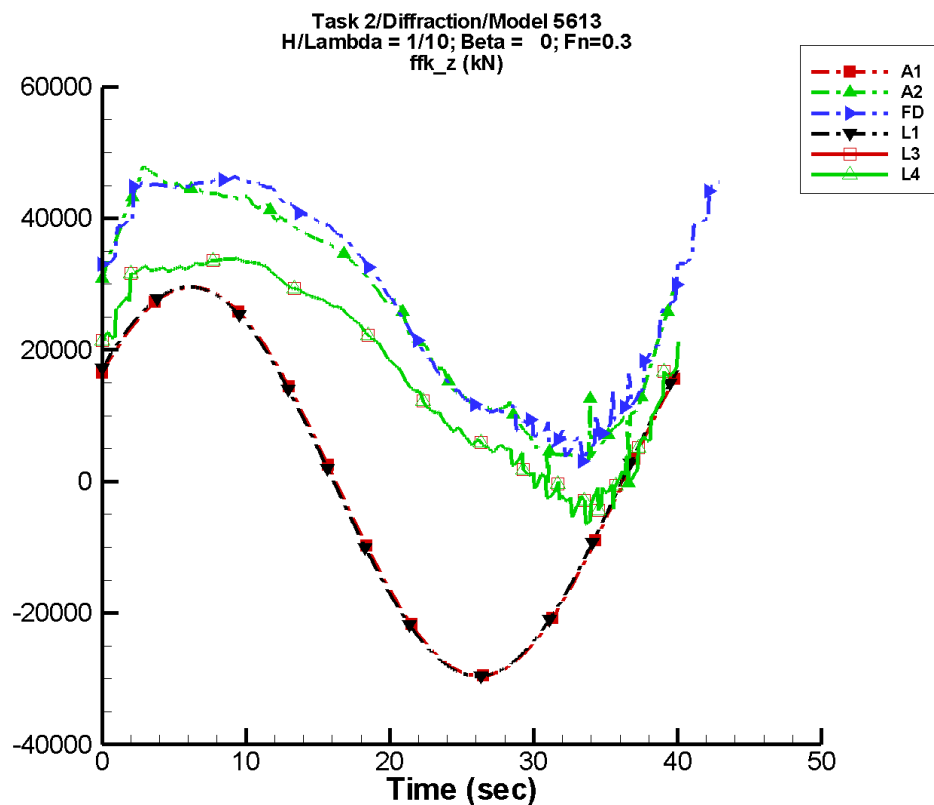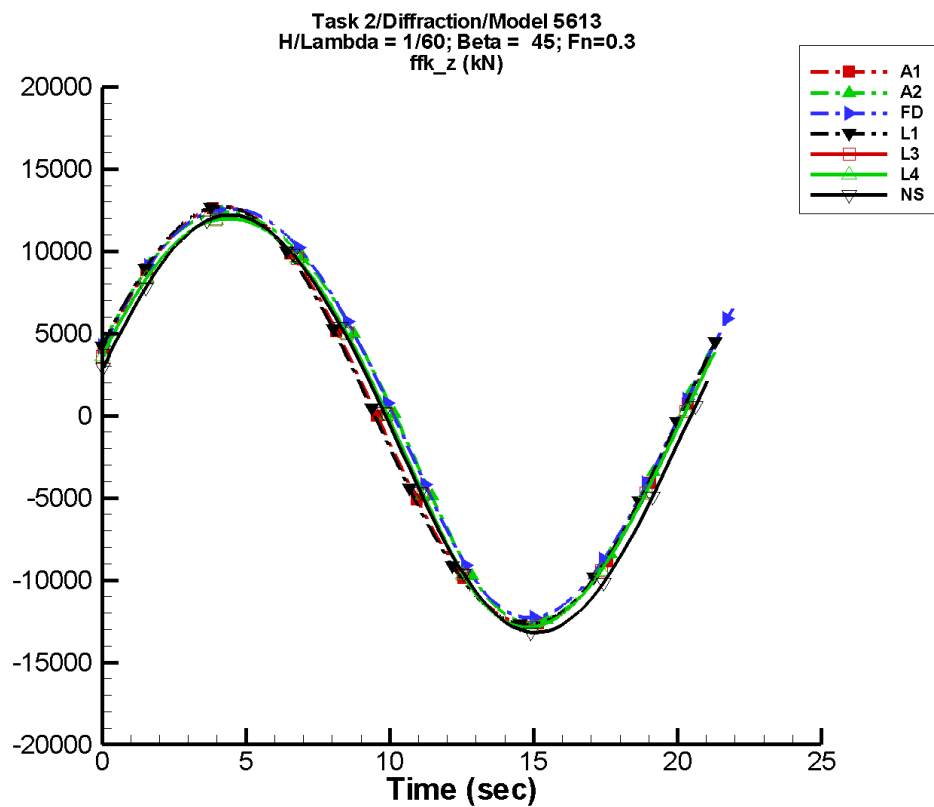
Table G–1483. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.39E-05	0.448	-109	1.98E-05	-170
A2	-1.31E+03	2.25E+03	179	1.10E+03	39
FD	-8.56E-05	3.80E-04	-114	5.28E-04	11
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-8.12E-03	1.14E-02	-59	7.79E-03	-100

Table G–1484. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.448	0.448	-0.448	0.448
A2	-2.45E+05	4.88E+04	-5.48E+04	6.53E+03
FD	-7.43E-03	6.93E-03	-2.01E-03	2.83E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.101	6.40E-02	-4.30E-02	3.14E-02

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–743. Time history of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1485. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.86E-05	0.598	-109	2.64E-05	-170
A2	-240.	734.	-148	709.	-35
FD	-2.57E-05	9.61E-04	-107	6.71E-04	15
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	2.36E-03	1.60E-02	78	1.02E-02	75

Table G–1486. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
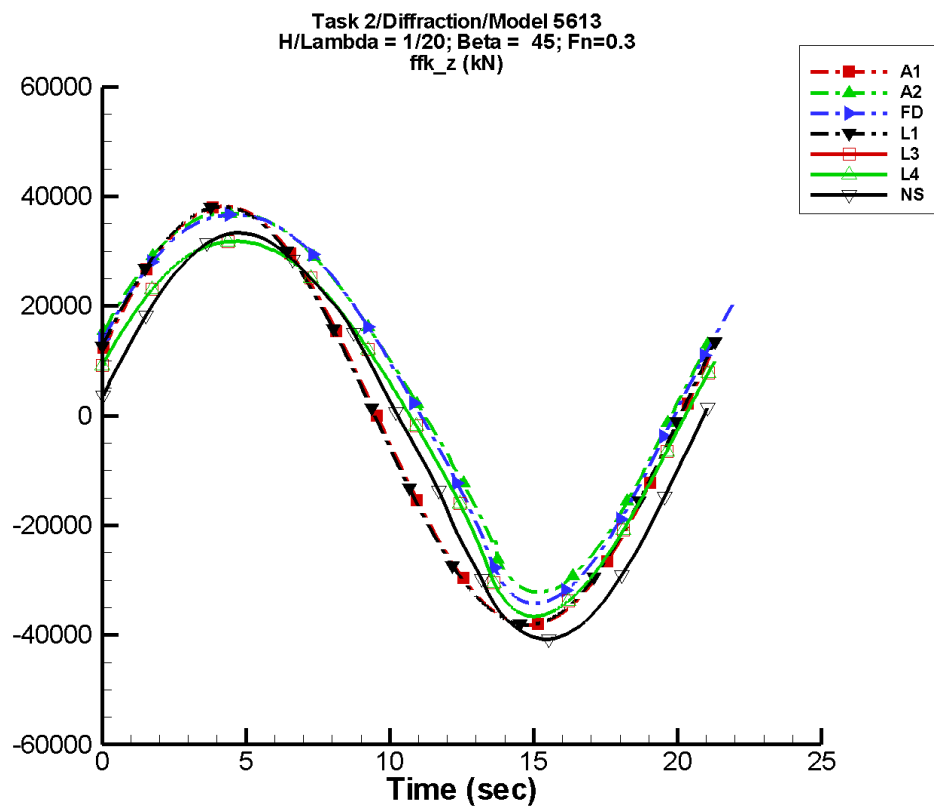
Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.598	0.598	-0.598	0.597
A2	-7.62E+04	4.52E+04	-1.48E+04	1.01E+04
FD	-8.91E-03	9.74E-03	-3.14E-03	3.72E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.123	0.126	-3.46E-02	5.95E-02

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–744. Time history of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
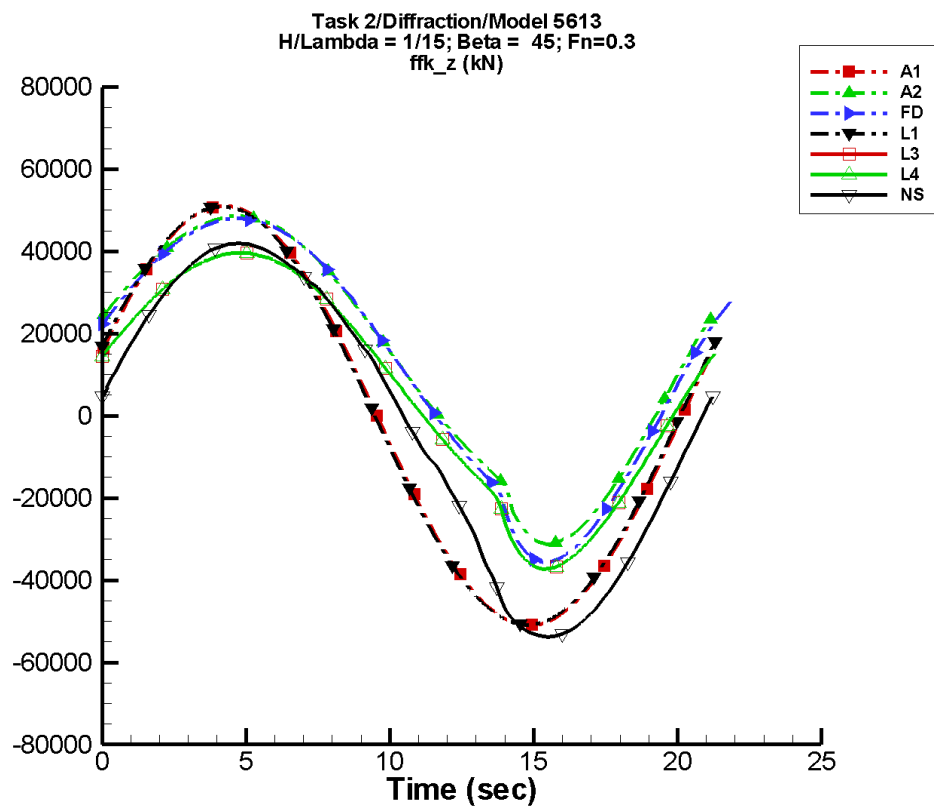
Table G–1487. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.78E-05	0.897	-109	3.99E-05	-170
A2	-5.03E+03	8.80E+03	-41	7.14E+03	14
FD	-1.23E-04	1.10E-03	-51	3.32E-04	59
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1488. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.897	0.897	-0.896	0.896
A2	-9.67E+05	1.99E+04	-1.29E+05	1.30E+04
FD	-1.12E-02	9.39E-03	-5.13E-03	2.95E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–745. Time history of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
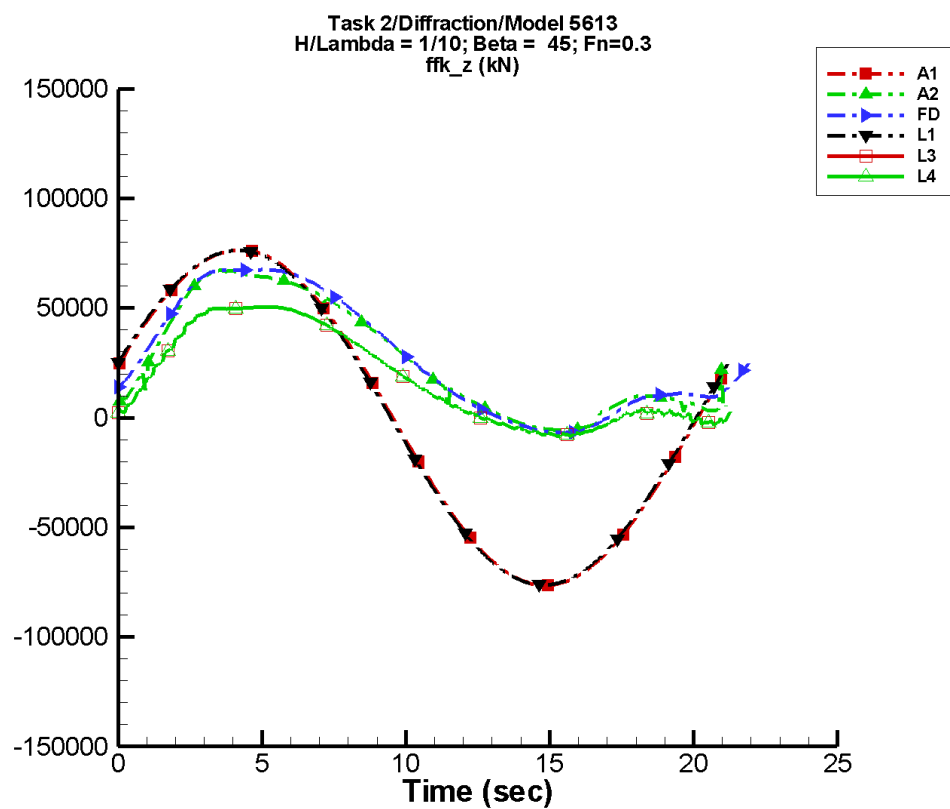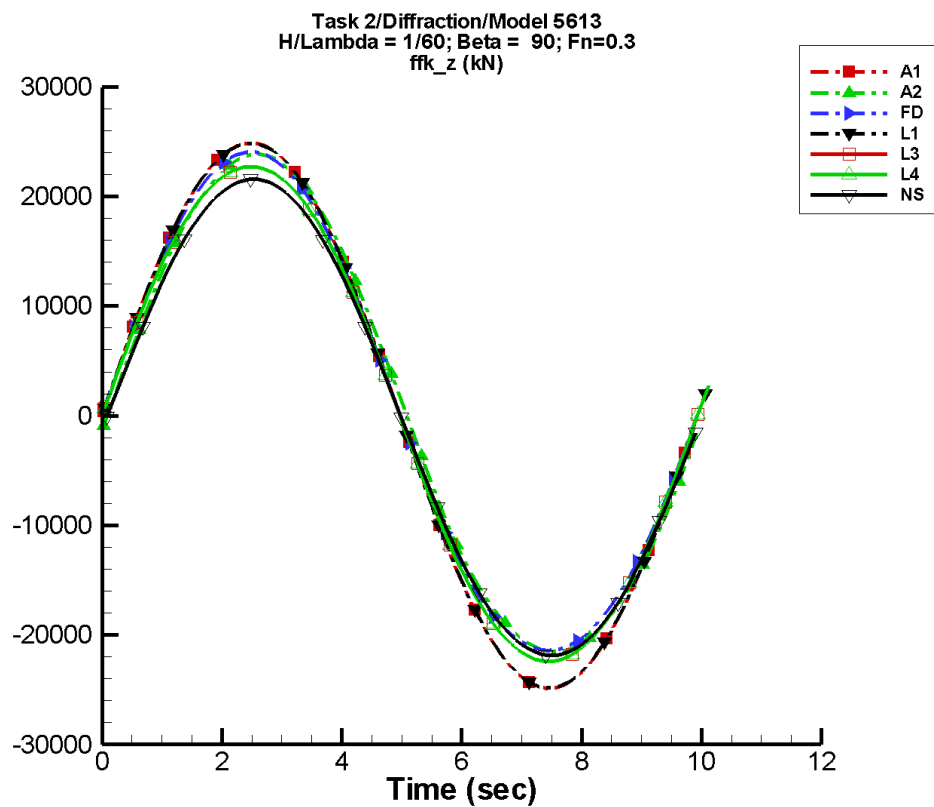
Table G–1489. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	14.3	6.33E+04	-1	21.5	164
A2	46.1	6.48E+04	-3	1.01E+04	-61
FD	45.2	6.43E+04	3	1.02E+04	-48
L1	9.34	6.31E+04	-1	14.0	162
L3	-12.0	6.36E+04	-1	9.10E+03	-50
L4	-12.0	6.36E+04	-1	9.10E+03	-50
NF	—	—	—	—	—
NS	-38.3	6.35E+04	-3	8.25E+03	-67

Table G–1490. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-6.33E+04	6.33E+04	-6.31E+04	6.31E+04
A2	-5.97E+04	7.16E+04	-5.94E+04	7.18E+04
FD	-5.86E+04	7.27E+04	-5.85E+04	7.24E+04
L1	-6.31E+04	6.31E+04	-6.31E+04	6.32E+04
L3	-5.92E+04	7.07E+04	-5.91E+04	7.06E+04
L4	-5.92E+04	7.07E+04	-5.91E+04	7.06E+04
NF	—	—	—	—
NS	-5.72E+04	7.07E+04	-5.67E+04	7.11E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–746. Time history of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1491. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
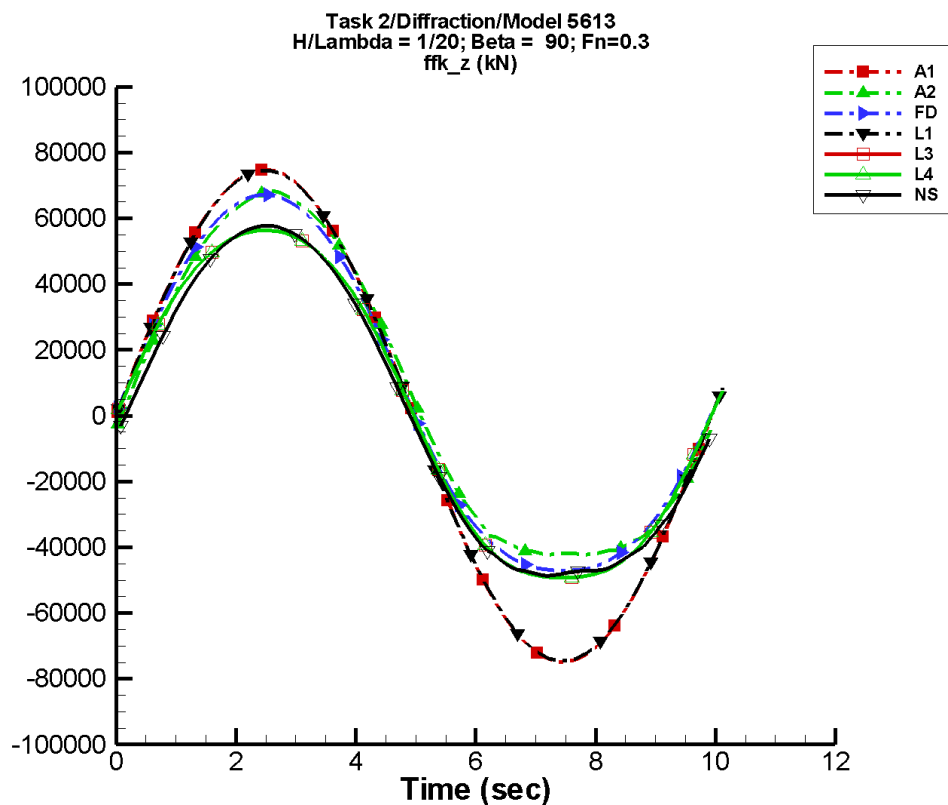
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	43.1	1.90E+05	-1	64.6	164
A2	-13.8	2.29E+05	-1	9.16E+04	-65
FD	354.	2.22E+05	5	8.47E+04	-56
L1	28.0	1.89E+05	-1	42.0	162
L3	-75.1	2.03E+05	1	7.55E+04	-62
L4	-75.1	2.03E+05	1	7.55E+04	-62
NF	—	—	—	—	—
NS	-379.	1.83E+05	-3	8.07E+04	-84

Table G–1492. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.90E+05	1.90E+05	-1.90E+05	1.90E+05
A2	-2.18E+05	5.61E+05	-2.15E+05	3.06E+05
FD	-2.07E+05	2.91E+05	-2.06E+05	2.90E+05
L1	-1.89E+05	1.89E+05	-1.89E+05	1.90E+05
L3	-1.88E+05	2.65E+05	-1.88E+05	2.64E+05
L4	-1.88E+05	2.65E+05	-1.88E+05	2.64E+05
NF	—	—	—	—
NS	-1.54E+05	2.57E+05	-1.51E+05	2.58E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–747. Time history of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
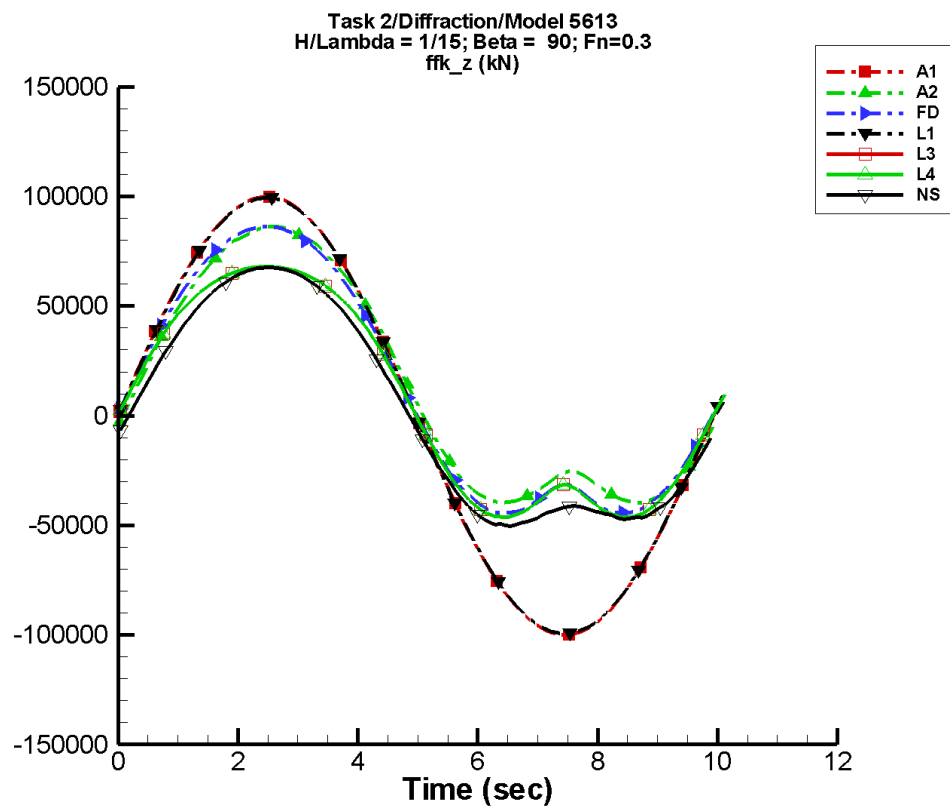
Table G–1493. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	57.5	2.54E+05	-1	86.2	164
A2	652.	3.40E+05	-1	1.55E+05	-66
FD	740.	3.24E+05	5	1.41E+05	-57
L1	37.4	2.52E+05	-1	55.9	162
L3	93.8	2.86E+05	2	1.22E+05	-64
L4	93.8	2.86E+05	2	1.22E+05	-64
NF	—	—	—	—	—
NS	-665.	2.46E+05	-3	1.39E+05	-85

Table G–1494. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.54E+05	2.54E+05	-2.54E+05	2.54E+05
A2	-3.92E+05	4.67E+05	-3.37E+05	4.67E+05
FD	-3.12E+05	4.38E+05	-3.11E+05	4.36E+05
L1	-2.52E+05	2.52E+05	-2.52E+05	2.53E+05
L3	-2.73E+05	3.86E+05	-2.73E+05	3.86E+05
L4	-2.73E+05	3.86E+05	-2.73E+05	3.86E+05
NF	—	—	—	—
NS	-2.29E+05	3.68E+05	-2.26E+05	3.70E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–748. Time history of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
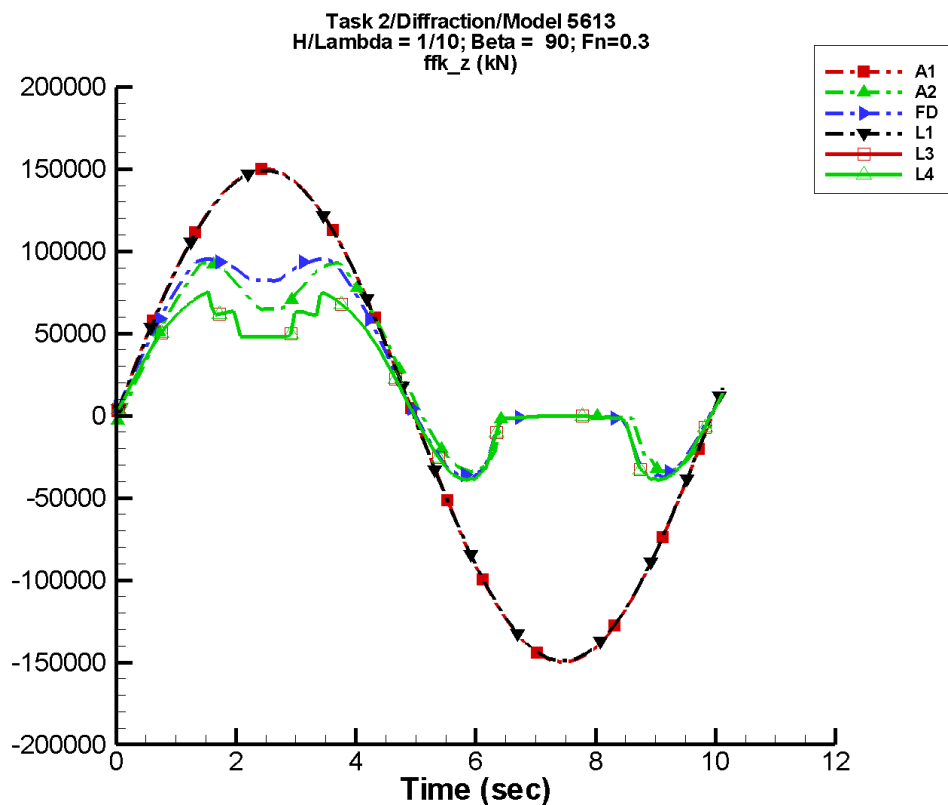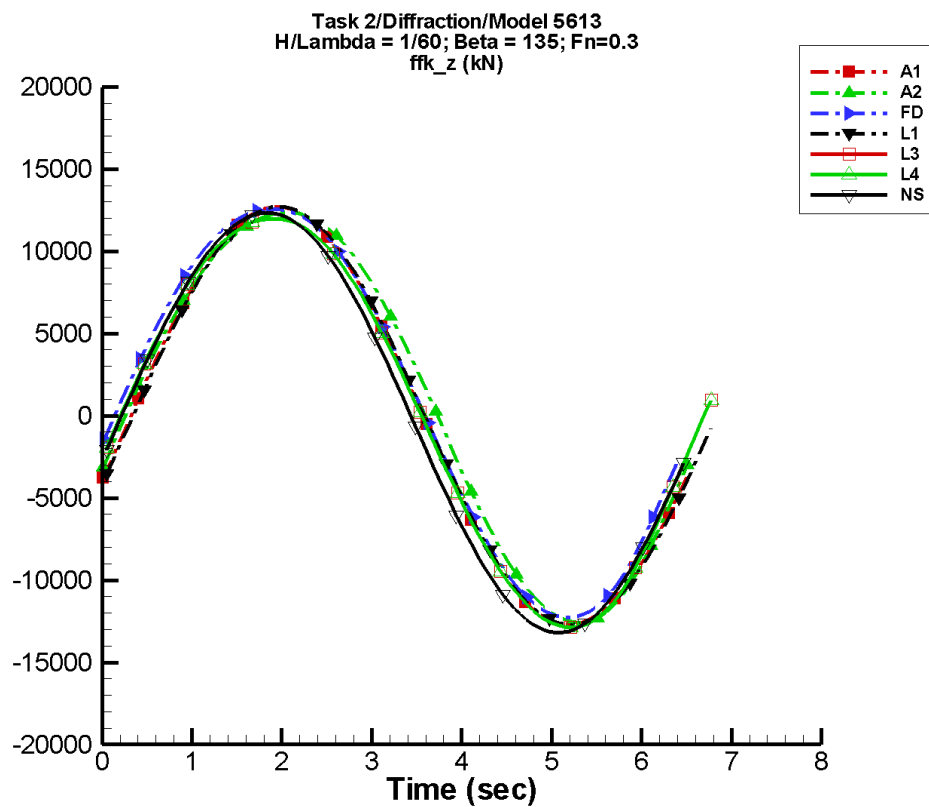
Table G–1495. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	86.2	3.81E+05	-1	129.	164
A2	4.16E+03	6.47E+05	-2	2.93E+05	-62
FD	1.18E+03	5.87E+05	6	2.61E+05	-56
L1	56.0	3.79E+05	-1	83.9	162
L3	-521.	4.86E+05	2	2.12E+05	-63
L4	-521.	4.86E+05	2	2.12E+05	-63
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1496. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.81E+05	3.81E+05	-3.80E+05	3.80E+05
A2	-1.14E+06	1.53E+06	-7.00E+05	8.82E+05
FD	-5.66E+05	7.92E+05	-5.63E+05	7.89E+05
L1	-3.79E+05	3.79E+05	-3.78E+05	3.79E+05
L3	-4.61E+05	6.55E+05	-4.60E+05	6.54E+05
L4	-4.61E+05	6.55E+05	-4.60E+05	6.54E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–749. Time history of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1497. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
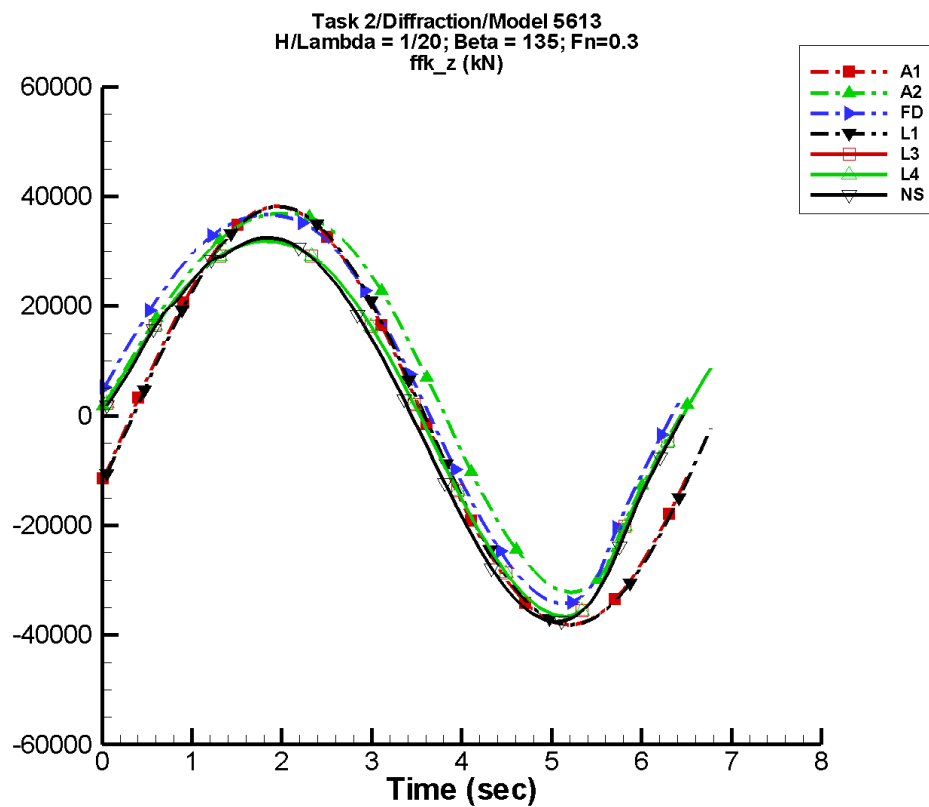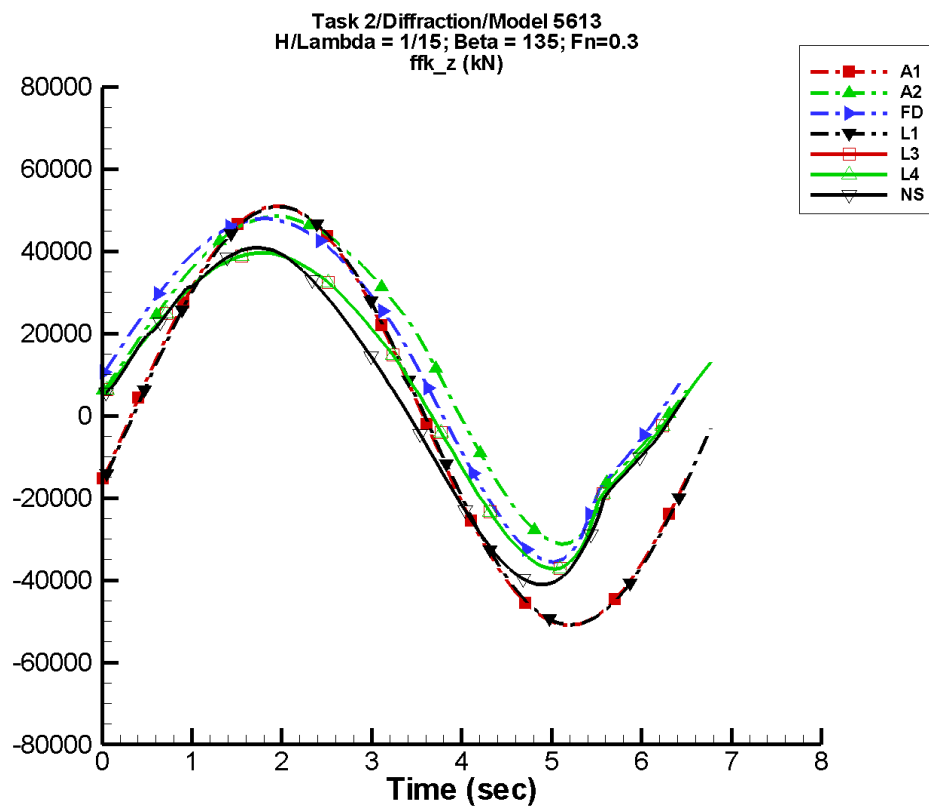
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	0.951	1.18E+03	-94	1.33	-156
A2	-30.8	4.92E+03	-99	8.60E+03	164
FD	44.3	2.59E+03	-101	9.41E+03	166
L1	0.263	1.07E+03	-94	0.429	151
L3	-5.22	2.26E+03	-95	9.51E+03	172
L4	-5.22	2.26E+03	-95	9.51E+03	172
NF	—	—	—	—	—
NS	-29.3	2.01E+03	88	3.33E+03	174

Table G–1498. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.18E+03	1.18E+03	-1.18E+03	1.17E+03
A2	-1.31E+04	1.30E+04	-1.21E+04	1.21E+04
FD	-1.20E+04	1.20E+04	-1.15E+04	1.15E+04
L1	-1.07E+03	1.07E+03	-1.08E+03	1.07E+03
L3	-1.17E+04	1.17E+04	-1.15E+04	1.15E+04
L4	-1.17E+04	1.17E+04	-1.15E+04	1.15E+04
NF	—	—	—	—
NS	-4.80E+03	4.82E+03	-4.65E+03	4.65E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.3
ffk_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–750. Time history of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
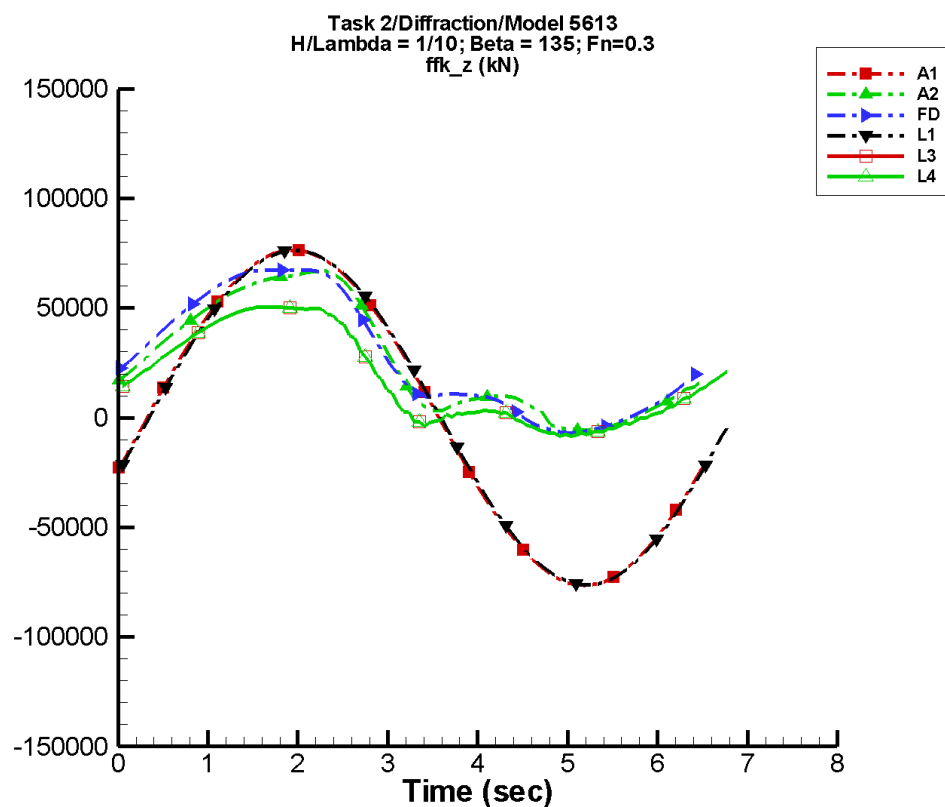
Table G–1499. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.86	3.56E+03	-94	3.99	-156
A2	-2.18E+03	4.28E+04	-97	7.91E+04	162
FD	949.	3.67E+04	-102	6.22E+04	167
L1	0.801	3.21E+03	-94	1.29	152
L3	12.8	3.24E+04	-96	5.89E+04	171
L4	12.8	3.24E+04	-96	5.89E+04	171
NF	—	—	—	—	—
NS	-969.	2.46E+03	-96	2.07E+04	171

Table G–1500. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.56E+03	3.56E+03	-3.56E+03	3.52E+03
A2	-1.99E+05	1.34E+05	-1.23E+05	1.22E+05
FD	-1.04E+05	1.04E+05	-1.00E+05	9.98E+04
L1	-3.21E+03	3.21E+03	-3.23E+03	3.20E+03
L3	-9.54E+04	9.54E+04	-9.39E+04	9.39E+04
L4	-9.54E+04	9.54E+04	-9.39E+04	9.39E+04
NF	—	—	—	—
NS	-2.92E+04	2.96E+04	-2.77E+04	2.82E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–751. Time history of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
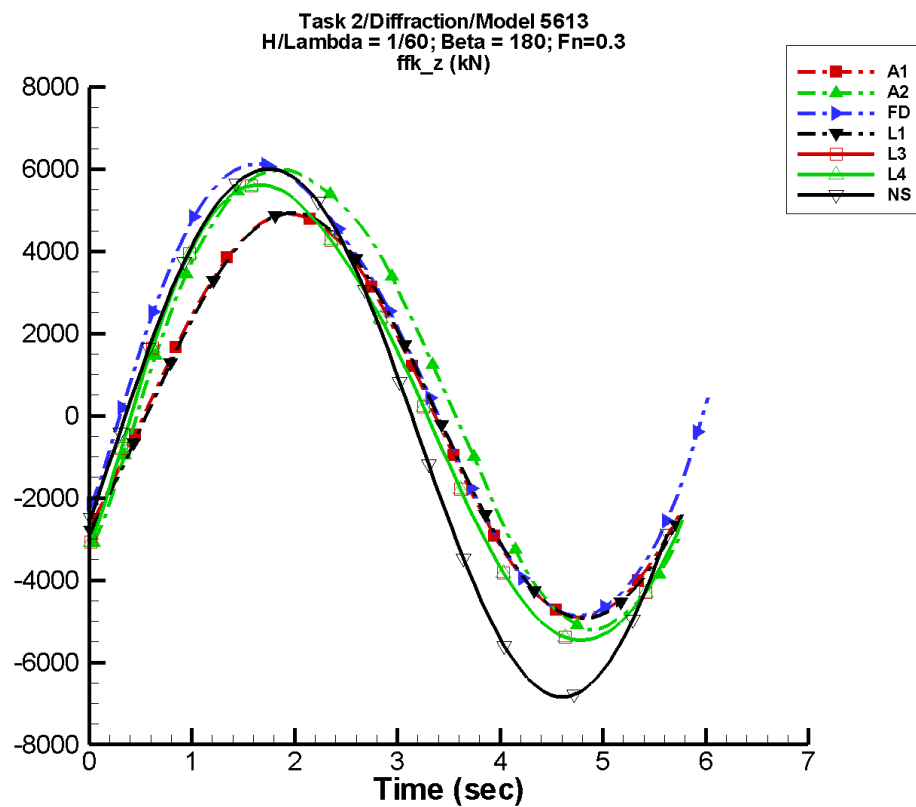
Table G–1501. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	3.82	4.76E+03	-94	5.33	-156
A2	-1.23E+03	9.20E+04	-100	1.12E+05	161
FD	2.01E+03	7.54E+04	-102	9.78E+04	168
L1	1.05	4.29E+03	-94	1.72	152
L3	61.5	6.68E+04	-96	8.80E+04	170
L4	61.5	6.68E+04	-96	8.80E+04	170
NF	—	—	—	—	—
NS	-1.29E+03	2.23E+04	87	1.71E+04	-2

Table G–1502. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.76E+03	4.75E+03	-4.76E+03	4.71E+03
A2	-2.18E+05	2.17E+05	-2.06E+05	2.06E+05
FD	-1.85E+05	1.85E+05	-1.77E+05	1.77E+05
L1	-4.29E+03	4.29E+03	-4.30E+03	4.27E+03
L3	-1.64E+05	1.64E+05	-1.61E+05	1.61E+05
L4	-1.64E+05	1.64E+05	-1.61E+05	1.61E+05
NF	—	—	—	—
NS	-3.70E+04	3.65E+04	-3.62E+04	3.56E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.3
ffk_mz (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–752. Time history of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
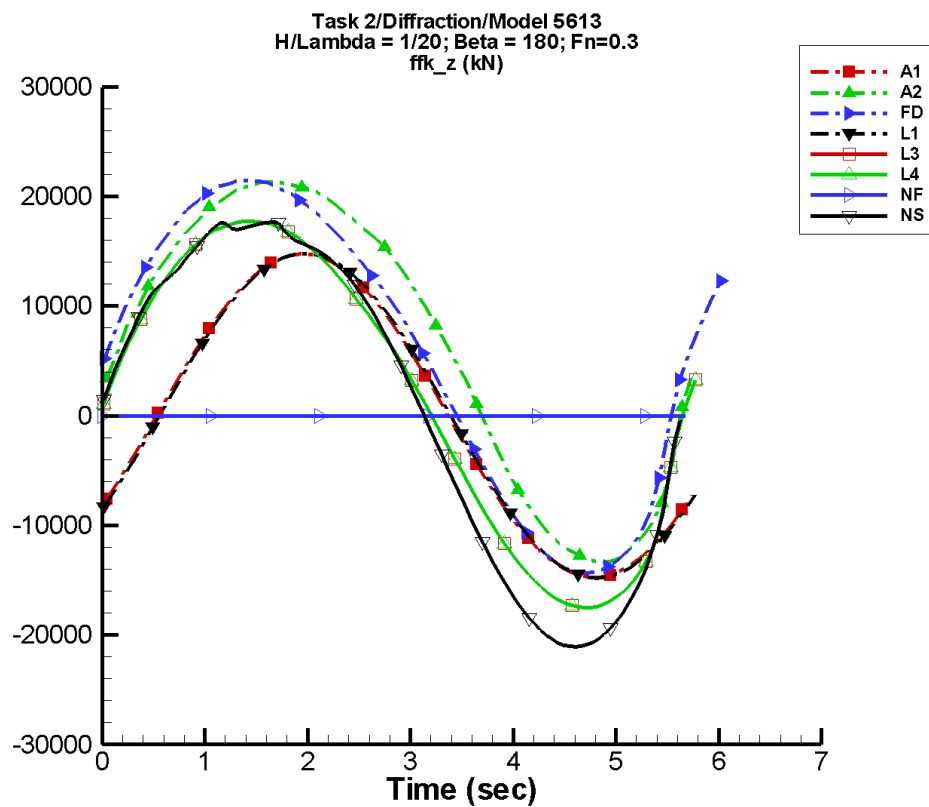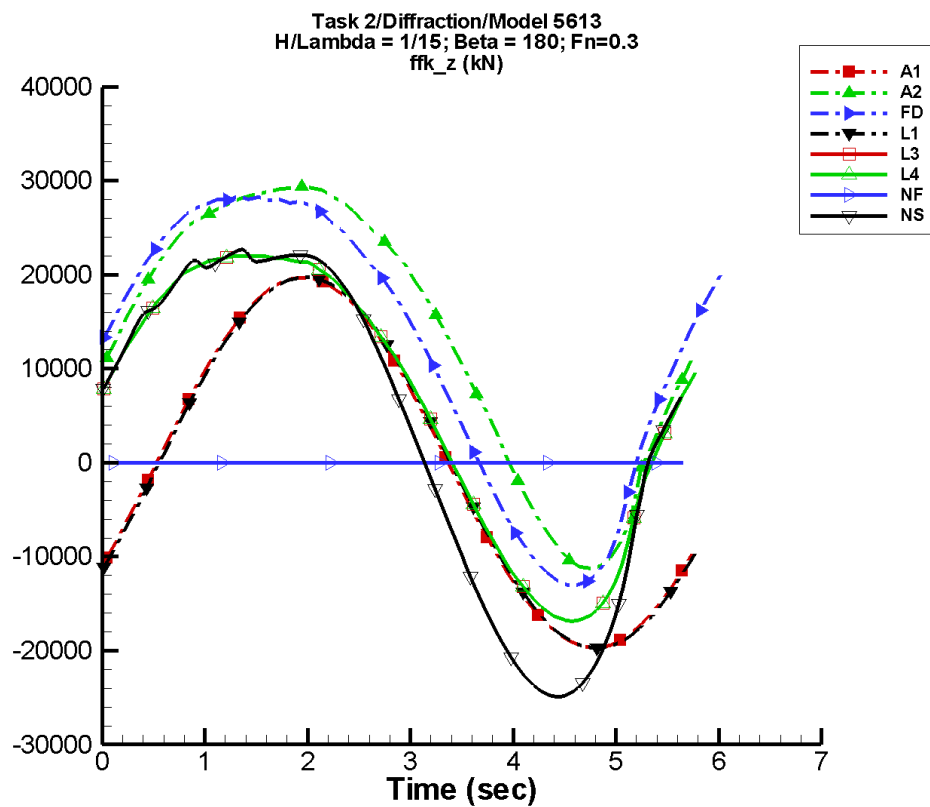
Table G–1503. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	5.73	7.13E+03	-94	7.99	-156
A2	-1.16E+03	2.08E+05	-100	2.30E+05	162
FD	3.10E+03	1.76E+05	-101	1.86E+05	167
L1	1.60	6.43E+03	-94	2.58	152
L3	-1.42E+03	1.47E+05	-96	1.48E+05	171
L4	-1.42E+03	1.47E+05	-96	1.48E+05	171
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1504. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-7.13E+03	7.13E+03	-7.13E+03	7.06E+03
A2	-5.05E+05	5.06E+05	-4.67E+05	4.68E+05
FD	-4.14E+05	4.14E+05	-3.87E+05	3.87E+05
L1	-6.43E+03	6.43E+03	-6.45E+03	6.41E+03
L3	-3.45E+05	3.45E+05	-3.38E+05	3.38E+05
L4	-3.45E+05	3.45E+05	-3.38E+05	3.38E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–753. Time history of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
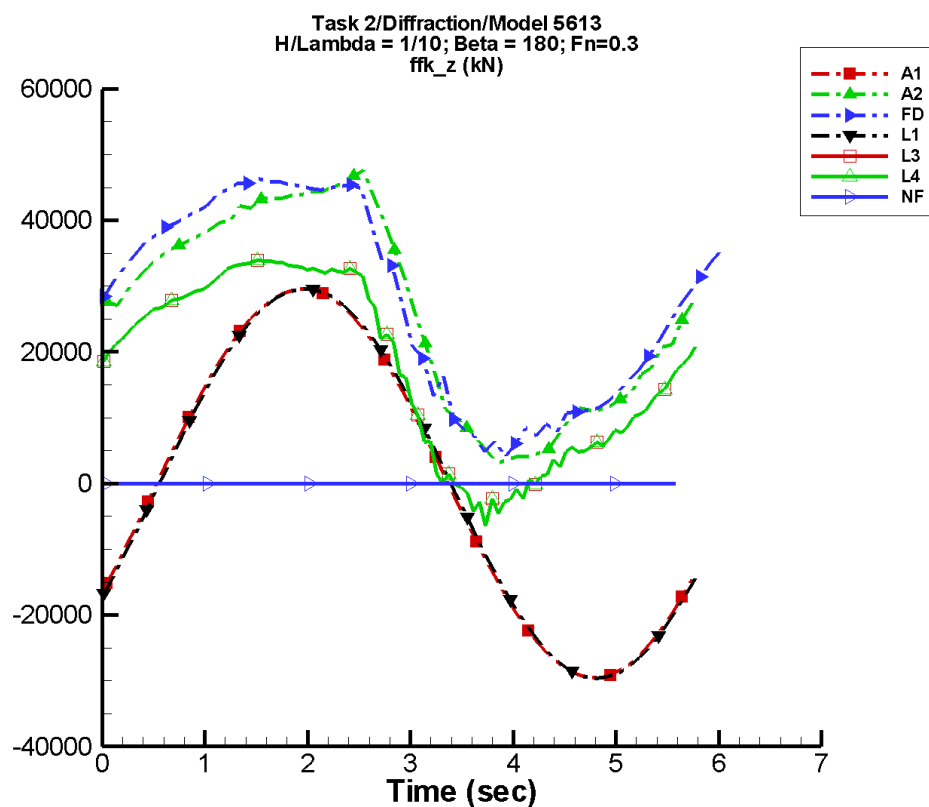
Table G–1505. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	27.5	6.33E+04	180	41.7	159
A2	34.9	6.47E+04	175	9.85E+03	44
FD	-45.0	6.45E+04	-176	1.05E+04	61
L1	7.57	6.31E+04	179	12.0	127
L3	35.7	6.37E+04	179	9.15E+03	46
L4	35.7	6.37E+04	179	9.15E+03	46
NF	—	—	—	—	—
NS	-37.3	6.16E+04	-179	1.24E+04	70

Table G–1506. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-6.32E+04	6.33E+04	-6.35E+04	6.18E+04
A2	-7.16E+04	5.96E+04	-7.09E+04	5.73E+04
FD	-7.26E+04	5.86E+04	-7.03E+04	5.73E+04
L1	-6.31E+04	6.31E+04	-6.25E+04	6.26E+04
L3	-7.07E+04	5.92E+04	-6.99E+04	5.87E+04
L4	-7.07E+04	5.92E+04	-6.99E+04	5.87E+04
NF	—	—	—	—
NS	-7.32E+04	5.19E+04	-7.21E+04	5.16E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–754. Time history of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
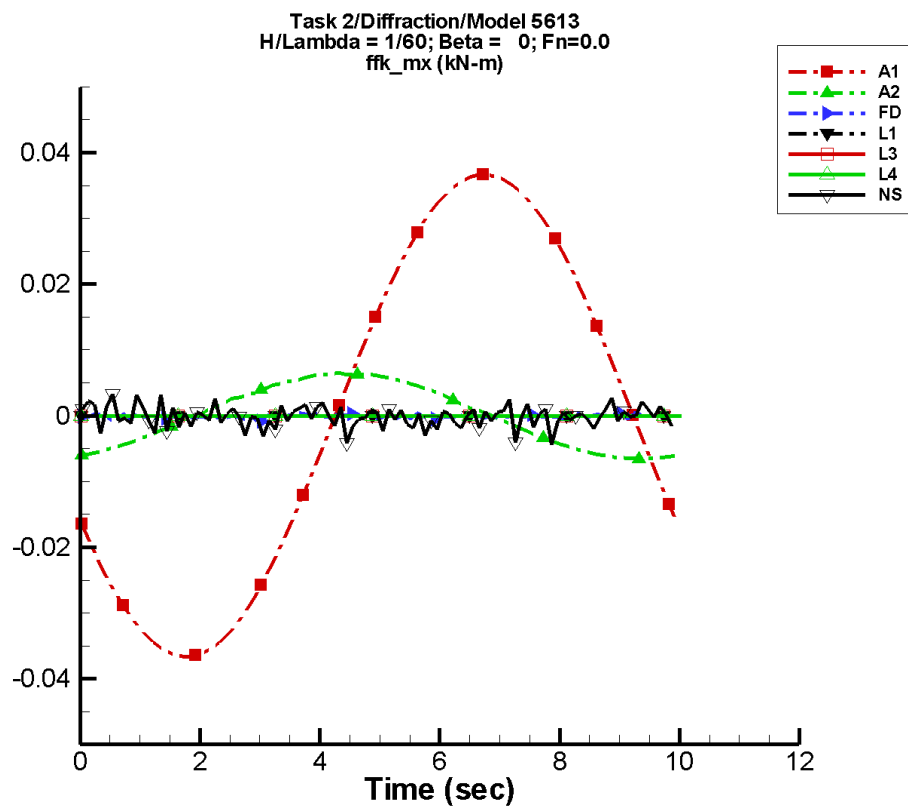
Table G–1507. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	82.6	1.90E+05	180	126.	159
A2	-325.	2.30E+05	173	9.23E+04	50
FD	-929.	2.24E+05	-178	8.67E+04	71
L1	22.7	1.89E+05	179	36.0	127
L3	-12.2	2.04E+05	177	7.53E+04	59
L4	-12.2	2.04E+05	177	7.53E+04	59
NF	—	—	—	—	—
NS	-947.	1.94E+05	-179	1.04E+05	74

Table G–1508. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
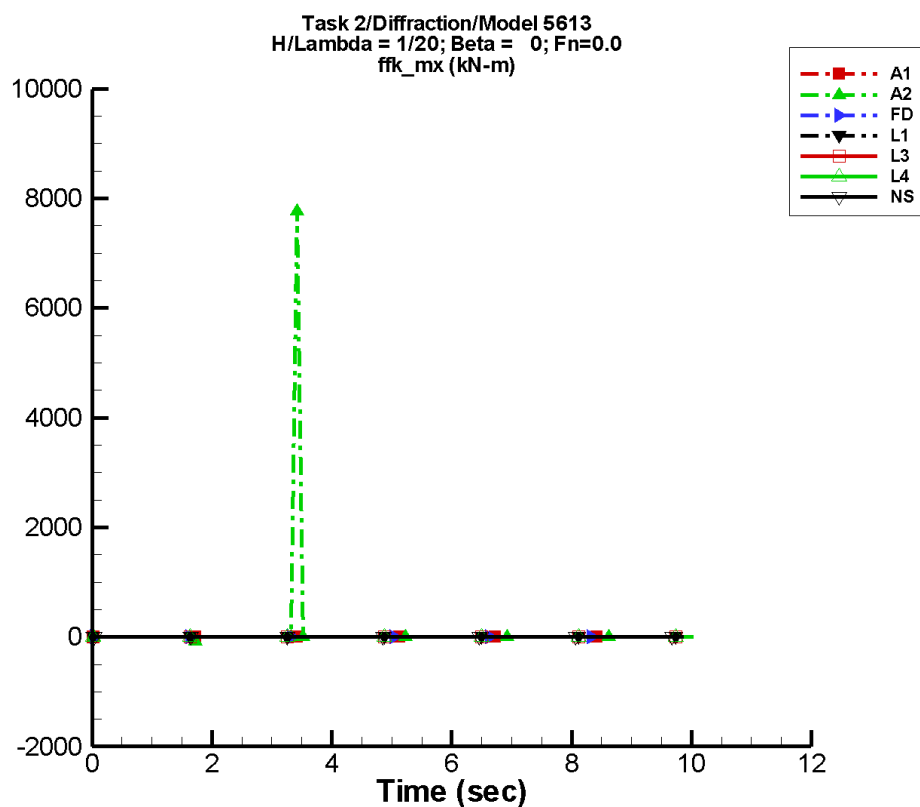
Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.90E+05	1.90E+05	-1.91E+05	1.86E+05
A2	-3.04E+05	2.17E+05	-2.99E+05	2.09E+05
FD	-2.91E+05	2.07E+05	-2.81E+05	1.97E+05
L1	-1.89E+05	1.89E+05	-1.88E+05	1.88E+05
L3	-2.65E+05	1.88E+05	-2.62E+05	1.86E+05
L4	-2.65E+05	1.88E+05	-2.62E+05	1.86E+05
NF	—	—	—	—
NS	-2.86E+05	1.84E+05	-2.81E+05	1.79E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.3
ffk_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–755. Time history of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
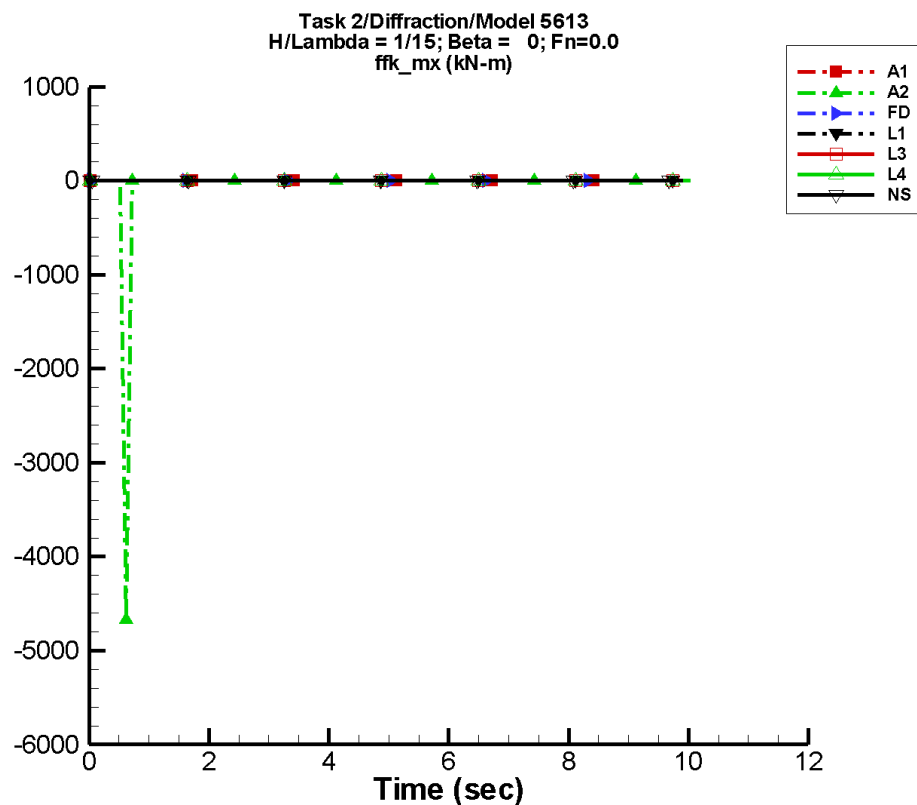
Table G–1509. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	110.	2.54E+05	180	168.	159
A2	-1.21E+03	3.41E+05	173	1.58E+05	51
FD	-1.62E+03	3.27E+05	-178	1.44E+05	72
L1	30.3	2.52E+05	179	48.1	127
L3	4.62	2.86E+05	177	1.22E+05	62
L4	4.62	2.86E+05	177	1.22E+05	62
NF	—	—	—	—	—
NS	-789.	2.43E+05	-177	1.79E+05	87

Table G–1510. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.54E+05	2.54E+05	-2.55E+05	2.48E+05
A2	-4.68E+05	3.39E+05	-4.58E+05	3.17E+05
FD	-4.38E+05	3.12E+05	-4.22E+05	2.96E+05
L1	-2.52E+05	2.52E+05	-2.50E+05	2.50E+05
L3	-3.86E+05	2.73E+05	-3.81E+05	2.69E+05
L4	-3.86E+05	2.73E+05	-3.81E+05	2.69E+05
NF	—	—	—	—
NS	-4.17E+05	2.54E+05	-4.11E+05	2.49E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–756. Time history of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
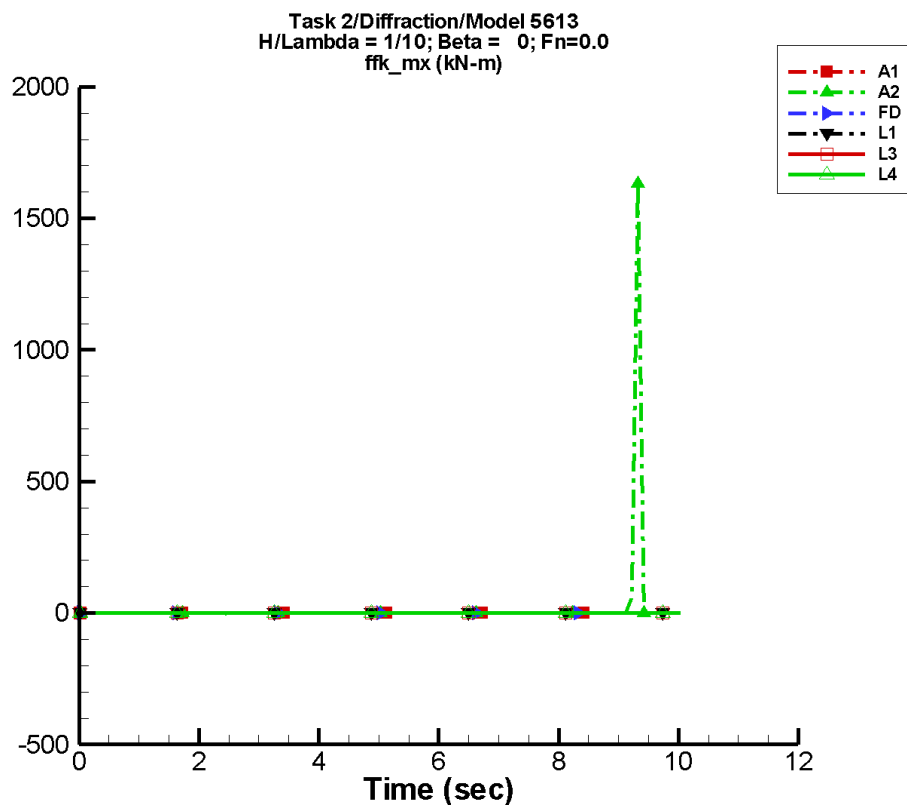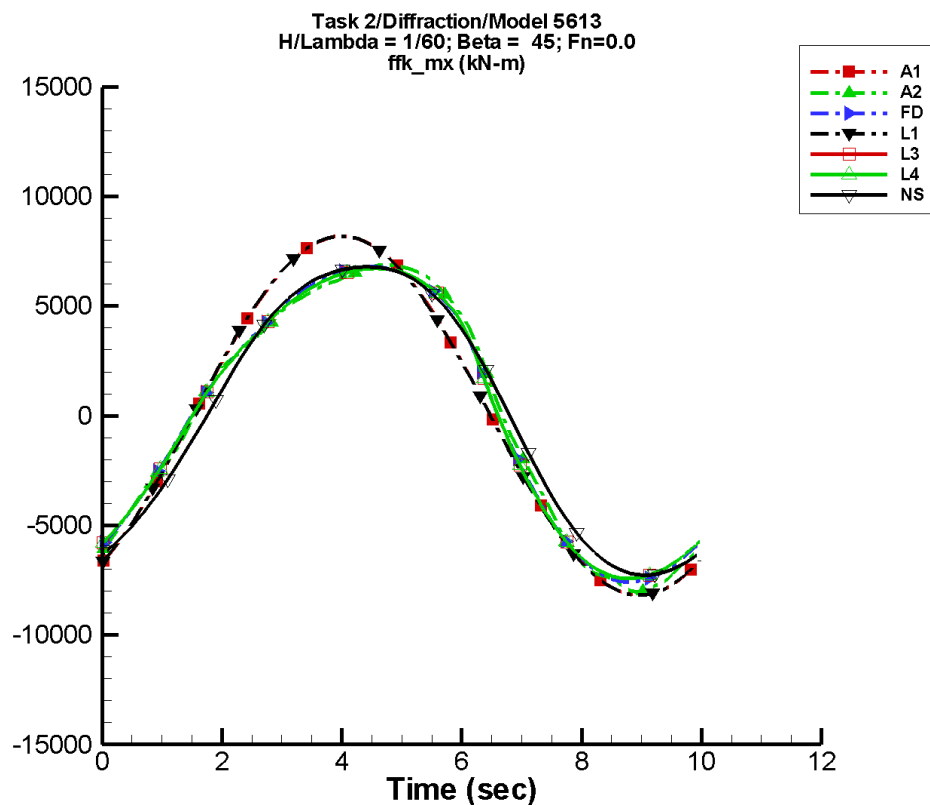
Table G–1511. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	165.	3.81E+05	180	251.	159
A2	-2.47E+03	6.55E+05	172	2.95E+05	49
FD	-2.43E+03	5.93E+05	-179	2.68E+05	71
L1	45.4	3.79E+05	179	72.0	127
L3	26.7	4.88E+05	176	2.12E+05	61
L4	26.7	4.88E+05	176	2.12E+05	61
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1512. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.81E+05	3.81E+05	-3.82E+05	3.72E+05
A2	-8.79E+05	6.55E+05	-8.58E+05	6.20E+05
FD	-7.91E+05	5.66E+05	-7.70E+05	5.39E+05
L1	-3.79E+05	3.79E+05	-3.75E+05	3.75E+05
L3	-6.54E+05	4.60E+05	-6.48E+05	4.53E+05
L4	-6.54E+05	4.60E+05	-6.48E+05	4.53E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 180; Fn=0.3
ffk_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–757. Time history of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
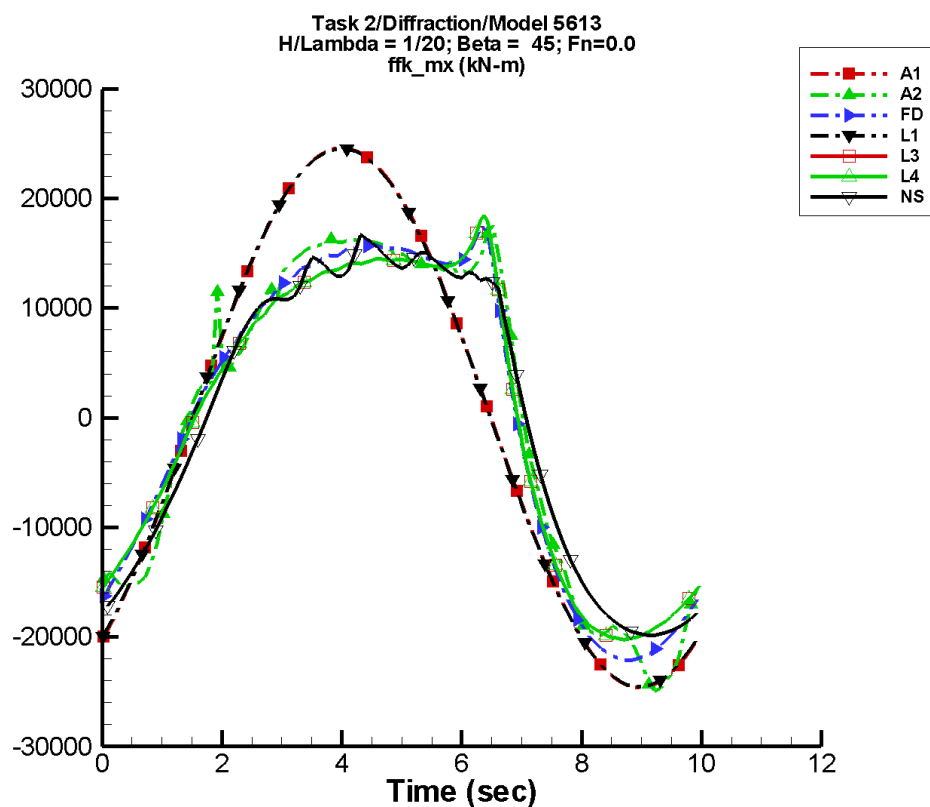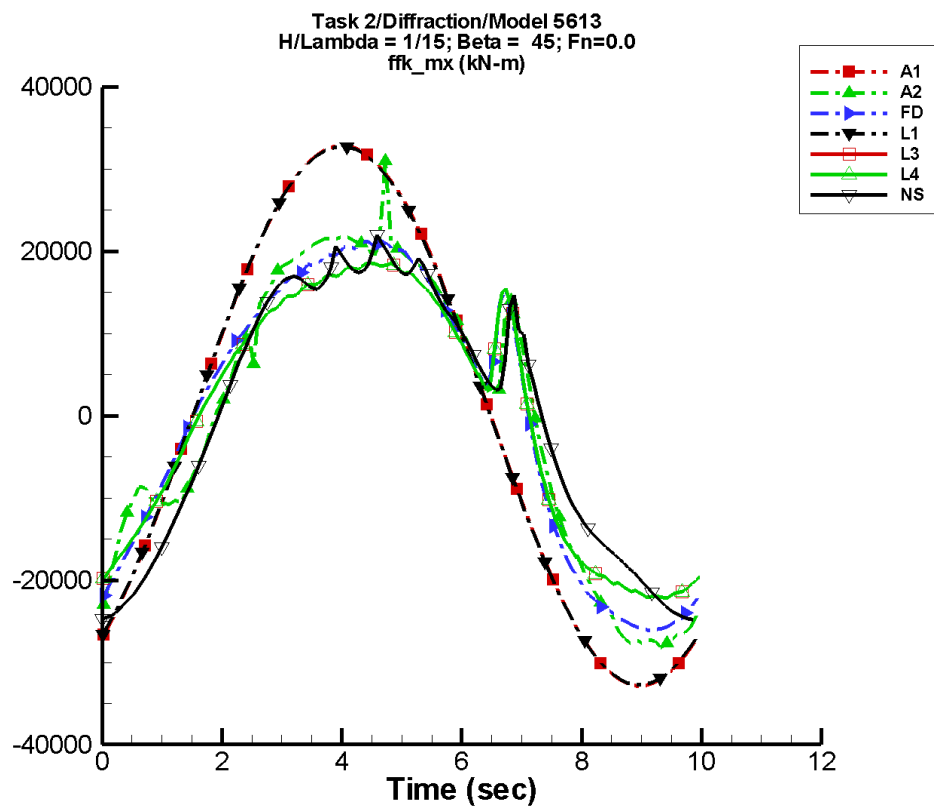
Table G–1513. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-5.59E-05	0.149	101	9.15E-05	-16
A2	-7.53E-04	5.36E-04	-72	5.86E-04	57
FD	-6.03E-03	3.98E-02	13	2.86E-02	2
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-3.49E-03	7.44E-03	87	1.88E-03	-115

Table G–1514. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.149	0.149	-0.144	0.144
A2	-4.79E-03	1.06E-03	-2.01E-03	1.40E-04
FD	-0.172	0.165	-6.06E-02	6.42E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-6.11E-02	6.45E-02	-1.48E-02	8.32E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–758. Time history of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
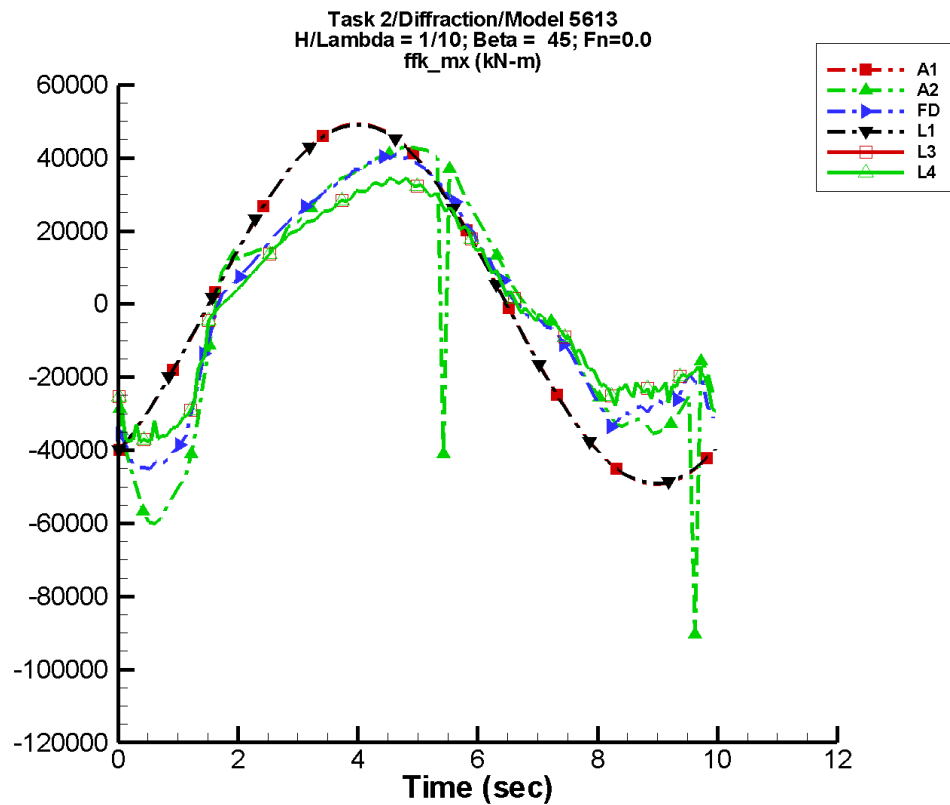
Table G–1515. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-1.68E-04	0.448	101	2.75E-04	-16
A2	-682.	1.53E+03	-166	1.95E+03	120
FD	-2.48E-03	0.111	38	9.54E-02	43
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-7.86E-03	6.27E-03	-68	9.24E-03	10

Table G–1516. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.448	0.447	-0.434	0.434
A2	-8.74E+04	1.30E-02	-1.17E+04	1.00E+03
FD	-0.411	0.470	-0.126	0.253
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.164	0.143	-3.74E-02	1.29E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 180; Fn=0.3
ffk_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–759. Time history of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
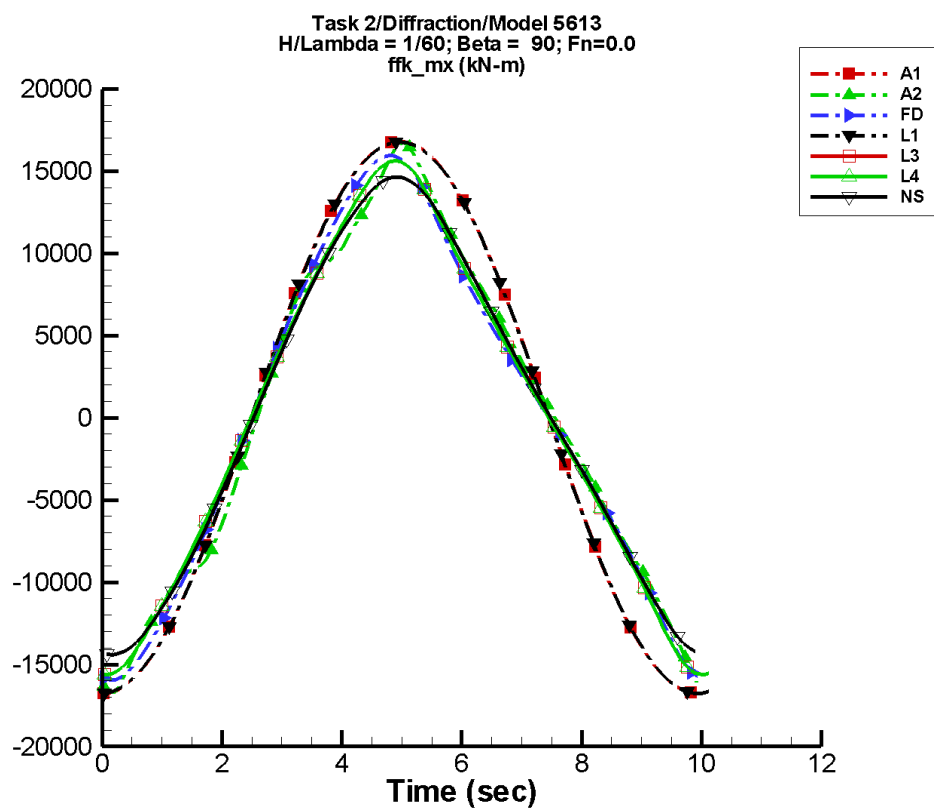
Table G–1517. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-2.24E-04	0.598	101	3.67E-04	-16
A2	277.	509.	107	521.	136
FD	6.39E-04	0.199	30	0.124	41
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	5.66E-03	1.35E-02	-83	4.46E-03	152

Table G–1518. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.598	0.597	-0.579	0.579
A2	-52.8	1.53E+04	-174.	2.04E+03
FD	-0.716	0.817	-0.257	0.312
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.446	0.246	-4.01E-02	7.03E-02

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–760. Time history of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
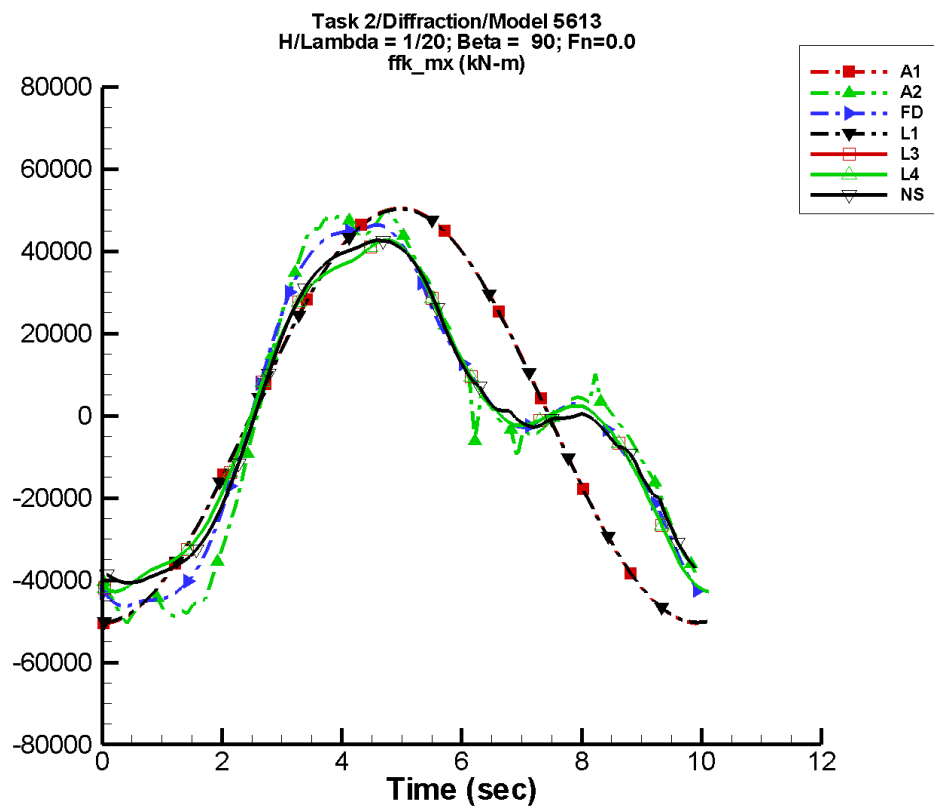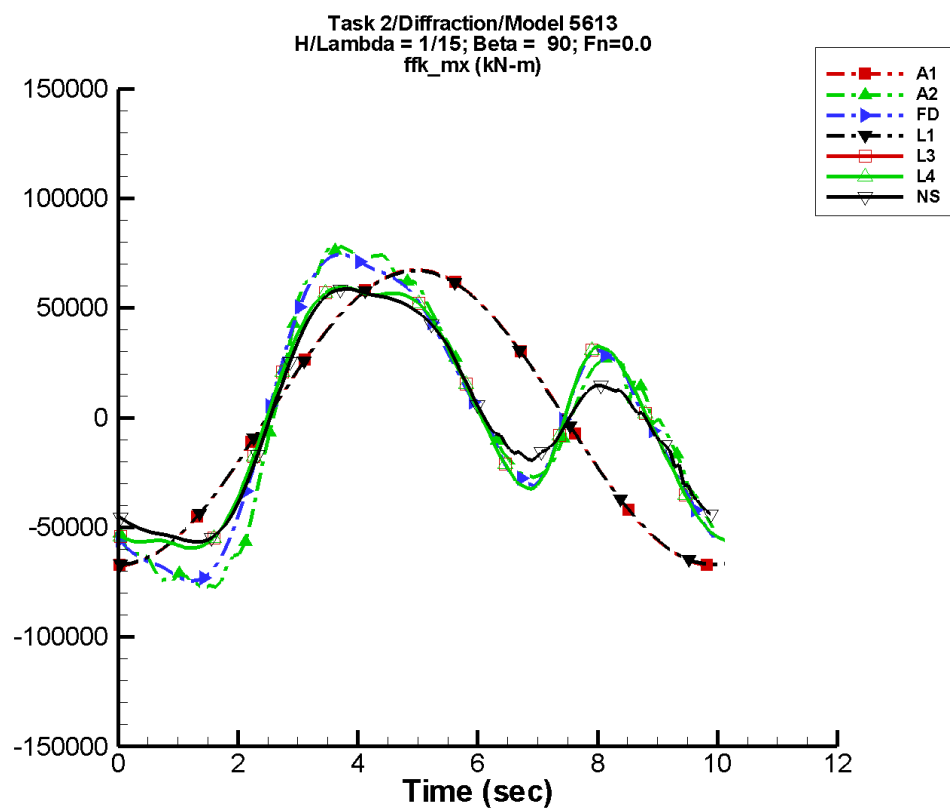
Table G–1519. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-3.37E-04	0.896	101	5.51E-04	-16
A2	324.	785.	-149	784.	-19
FD	0.139	0.435	59	0.534	86
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1520. Minimum and maximum of of M_z^{fk} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.897	0.896	-0.869	0.869
A2	-6.30E+03	2.07E+04	-1.03E+03	2.82E+03
FD	-2.15	2.94	-0.906	1.49
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–761. Time history of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
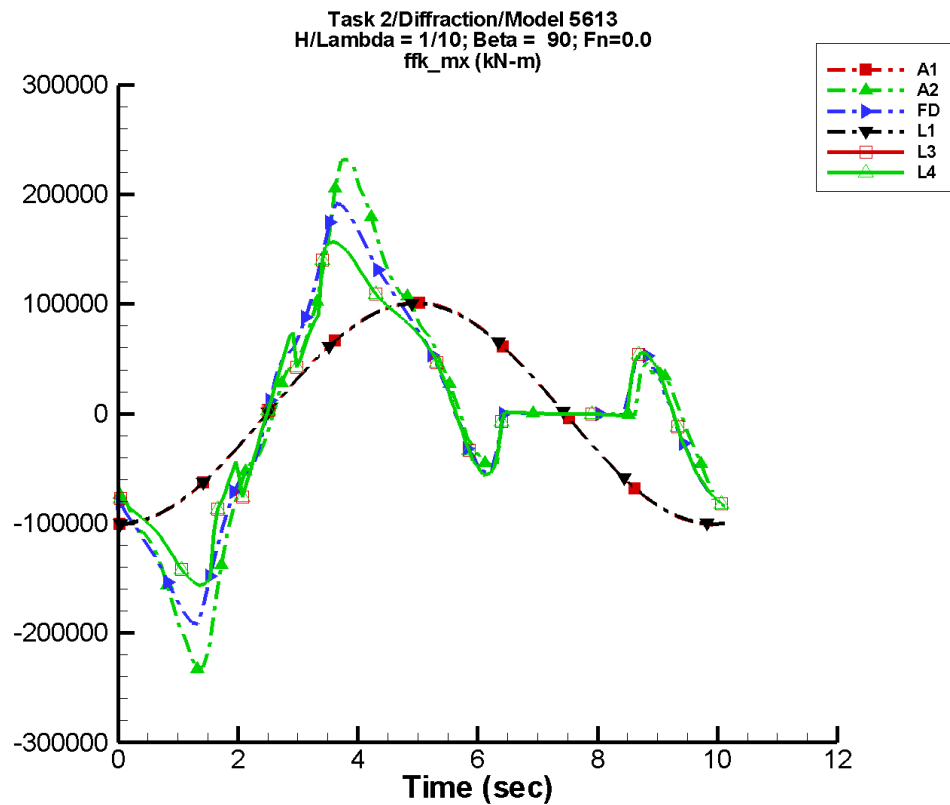
Table G–1521. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-0.547	698.	-120	0.313	-159
A2	-0.547	698.	-120	0.313	-159
FD	-1.03E-02	29.8	164	1.34E-02	-168
L1	2.15	667.	-102	1.89	77
L3	2.14	667.	-103	1.88	77
L4	52.7	649.	-105	62.3	25
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1522. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-702.	701.	-694.	694.
A2	-702.	701.	-694.	694.
FD	-29.8	29.8	-29.5	29.9
L1	-664.	672.	-661.	669.
L3	-663.	671.	-661.	669.
L4	-568.	771.	-565.	753.
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.0
fdif_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–762. Time history of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
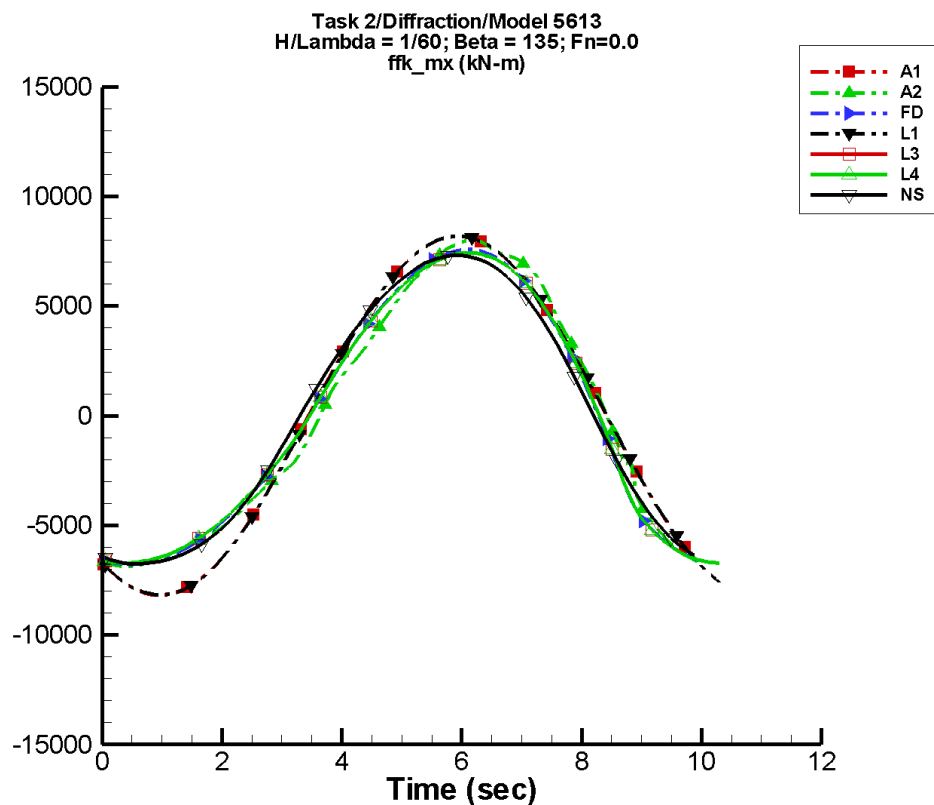
Table G–1523. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.65	2.10E+03	-120	0.942	-159
A2	-1.65	2.10E+03	-120	0.942	-159
FD	-3.09E-02	89.5	164	4.01E-02	-168
L1	16.1	2.00E+03	-102	20.4	80
L3	16.1	2.00E+03	-103	20.4	80
L4	456.	1.83E+03	-108	392.	15
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1524. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.11E+03	2.11E+03	-2.09E+03	2.09E+03
A2	-2.11E+03	2.11E+03	-2.09E+03	2.09E+03
FD	-89.5	89.5	-88.6	89.6
L1	-1.97E+03	2.04E+03	-1.96E+03	2.03E+03
L3	-1.97E+03	2.04E+03	-1.96E+03	2.03E+03
L4	-1.21E+03	3.11E+03	-1.19E+03	2.86E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 0; Fn=0.0
fdif_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–763. Time history of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
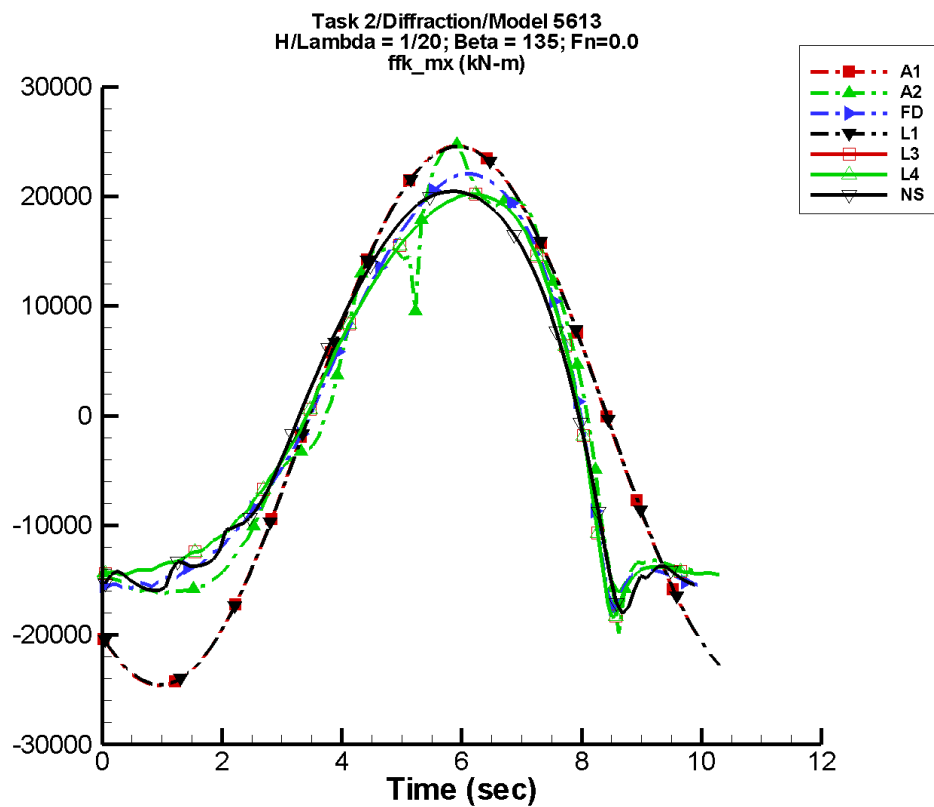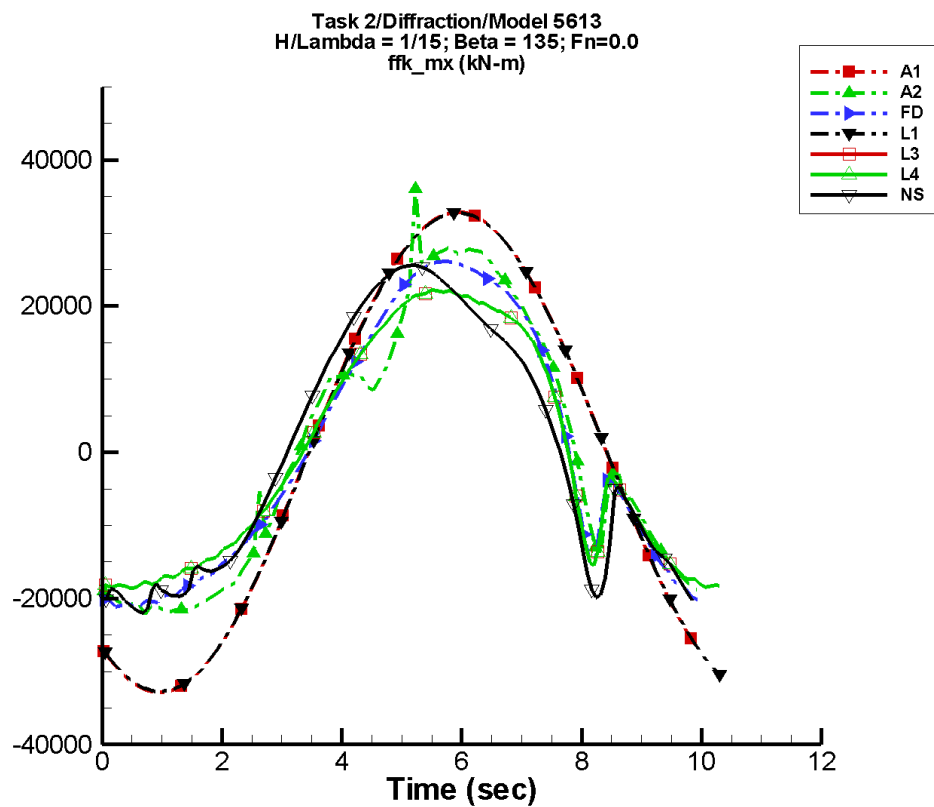
Table G–1525. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-2.20	2.80E+03	-120	1.26	-159
A2	-2.20	2.80E+03	-120	1.26	-159
FD	-4.13E-02	119.	164	5.35E-02	-168
L1	27.9	2.67E+03	-102	37.1	80
L3	27.9	2.67E+03	-103	37.1	80
L4	750.	2.40E+03	-109	588.	17
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1526. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered		Filtered	
	Minimum (kN)	Maximum (kN)	Minimum (kN)	Maximum (kN)
A1	-2.82E+03	2.81E+03	-2.78E+03	2.79E+03
A2	-2.82E+03	2.81E+03	-2.78E+03	2.79E+03
FD	-119.	119.	-118.	119.
L1	-2.61E+03	2.73E+03	-2.60E+03	2.72E+03
L3	-2.61E+03	2.73E+03	-2.60E+03	2.72E+03
L4	-1.41E+03	4.14E+03	-1.38E+03	3.82E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–764. Time history of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
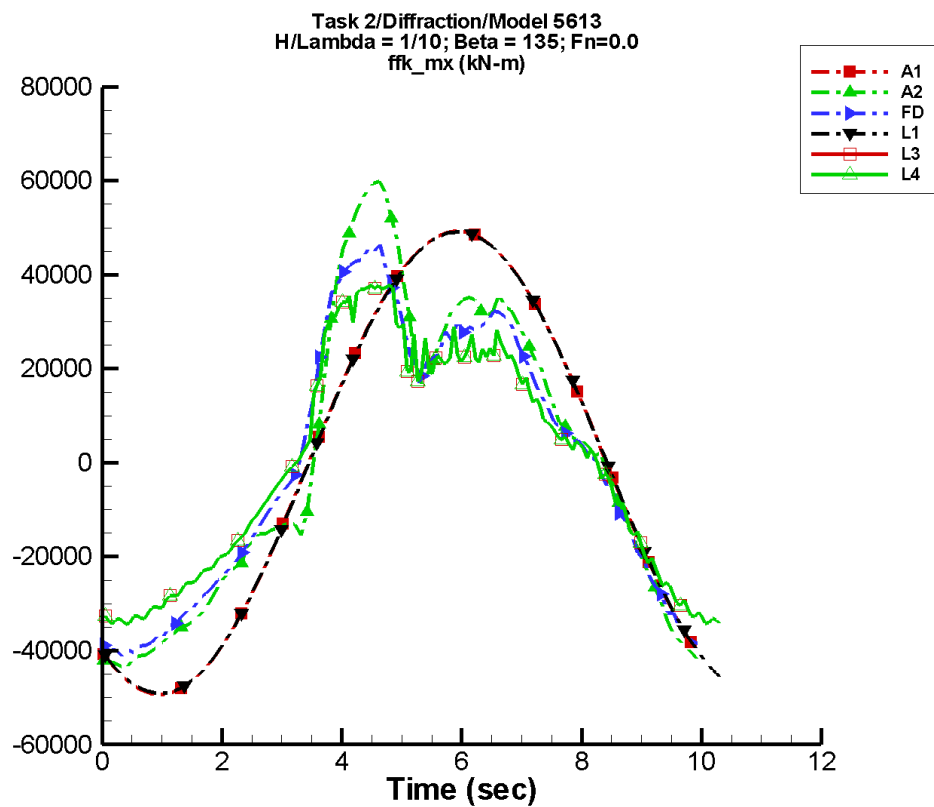
Table G–1527. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-3.30	4.20E+03	-120	1.89	-159
A2	-3.30	4.20E+03	-120	1.89	-159
FD	-6.19E-02	179.	164	8.03E-02	-168
L1	61.3	4.00E+03	-102	85.2	81
L3	61.2	4.00E+03	-103	85.1	81
L4	1.23E+03	3.92E+03	-108	1.12E+03	10
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1528. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-4.23E+03	4.22E+03	-4.18E+03	4.18E+03
A2	-4.23E+03	4.22E+03	-4.18E+03	4.18E+03
FD	-179.	179.	-177.	179.
L1	-3.86E+03	4.15E+03	-3.85E+03	4.13E+03
L3	-3.86E+03	4.15E+03	-3.85E+03	4.13E+03
L4	-3.34E+03	6.54E+03	-2.92E+03	6.16E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–765. Time history of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
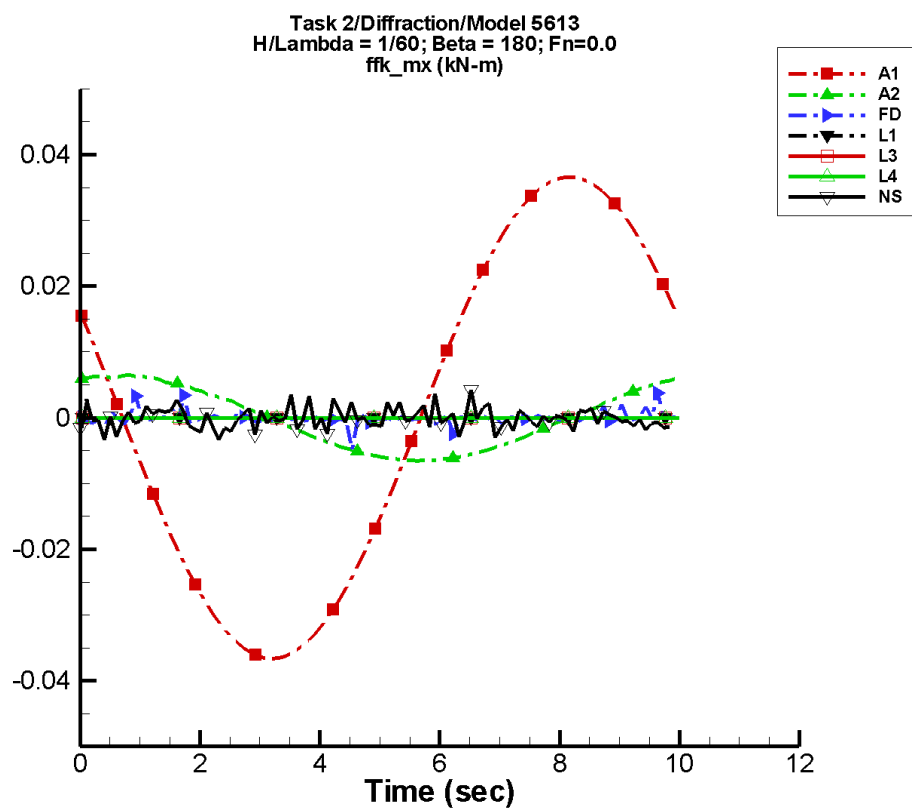
Table G–1529. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-0.246	760.	-130	0.459	170
A2	-0.246	760.	-130	0.459	170
FD	6.54E-04	7.24	21	3.02E-03	51
L1	8.90	737.	-111	7.37	175
L3	8.90	737.	-112	7.38	175
L4	58.7	711.	-113	16.3	67
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1530. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
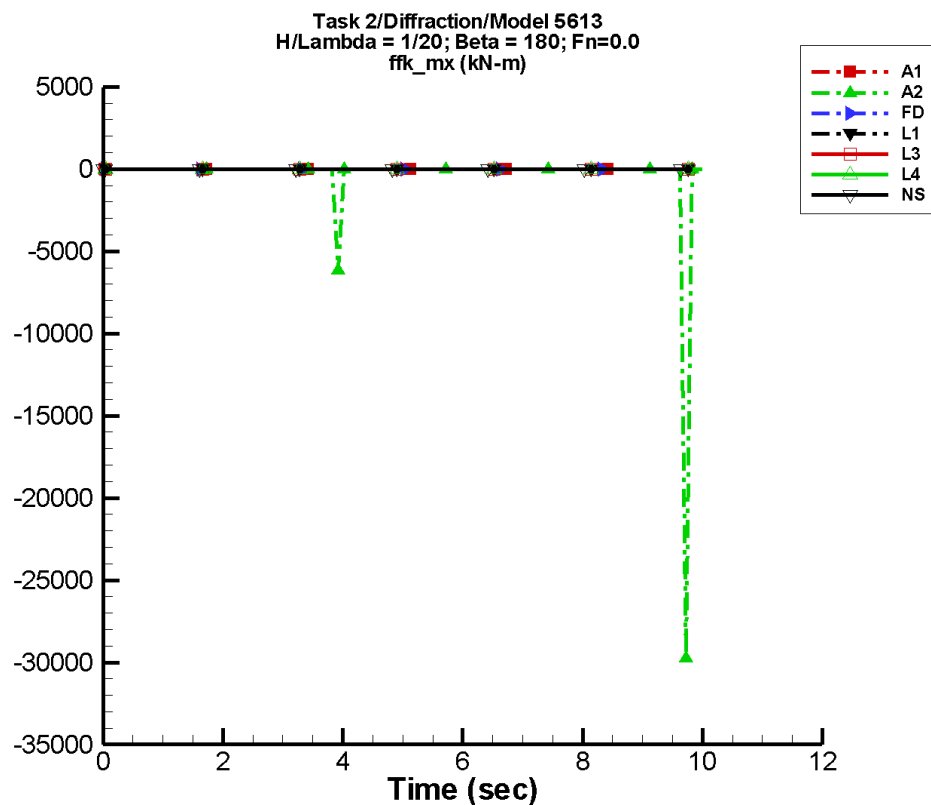
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-765.	764.	-757.	756.
A2	-765.	764.	-757.	756.
FD	-7.24	7.24	-7.18	7.17
L1	-733.	742.	-730.	739.
L3	-733.	741.	-730.	739.
L4	-643.	795.	-636.	783.
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 45; Fn=0.0
fdif_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–766. Time history of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
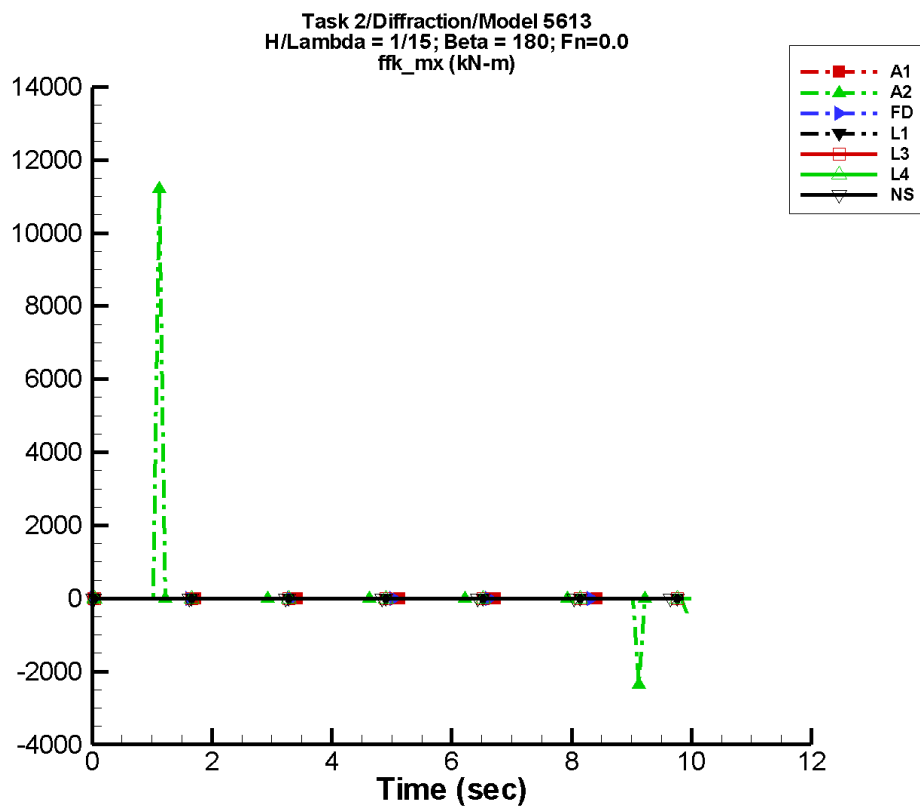
Table G–1531. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-0.739	2.29E+03	-130	1.38	170
A2	-0.739	2.29E+03	-130	1.38	170
FD	1.96E-03	21.7	21	9.07E-03	51
L1	79.3	2.21E+03	-111	68.1	174
L3	79.3	2.21E+03	-112	68.1	174
L4	495.	2.09E+03	-114	180.	104
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1532. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.30E+03	2.30E+03	-2.28E+03	2.27E+03
A2	-2.30E+03	2.30E+03	-2.28E+03	2.27E+03
FD	-21.7	21.7	-21.5	21.5
L1	-2.18E+03	2.25E+03	-2.17E+03	2.25E+03
L3	-2.18E+03	2.25E+03	-2.17E+03	2.24E+03
L4	-1.61E+03	2.69E+03	-1.56E+03	2.66E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–767. Time history of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
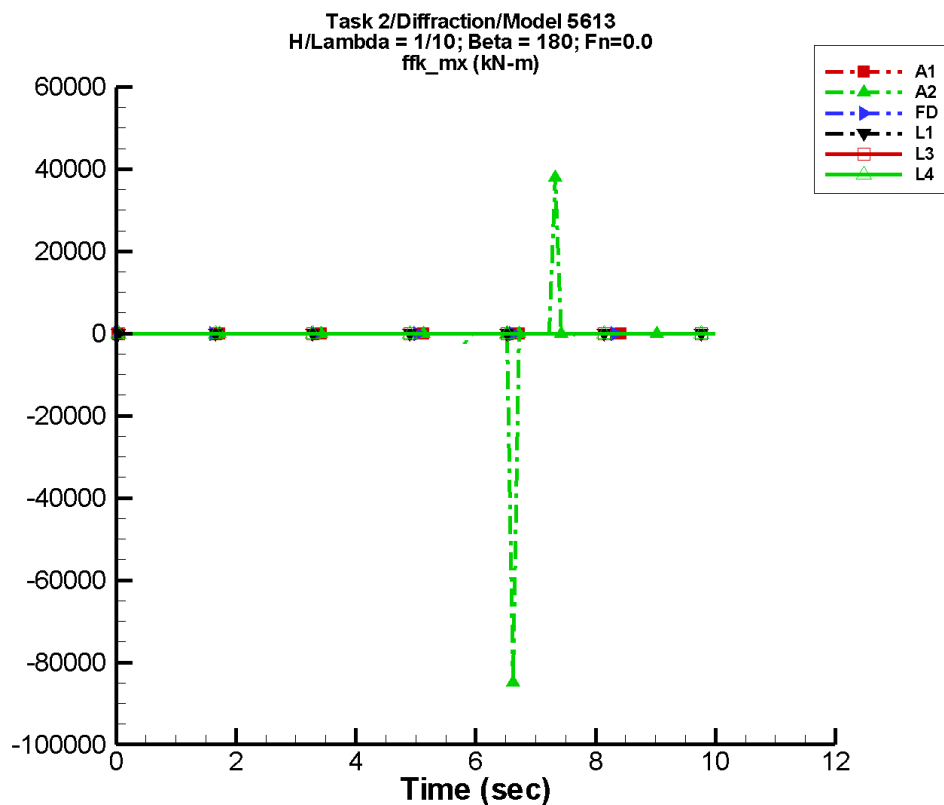
Table G–1533. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-0.987	3.05E+03	-130	1.84	170
A2	-0.987	3.05E+03	-130	1.84	170
FD	2.61E-03	29.0	21	1.21E-02	51
L1	141.	2.95E+03	-111	121.	174
L3	141.	2.95E+03	-112	122.	174
L4	765.	2.88E+03	-114	376.	98
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1534. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-3.07E+03	3.07E+03	-3.04E+03	3.04E+03
A2	-3.07E+03	3.07E+03	-3.04E+03	3.04E+03
FD	-29.0	29.0	-28.7	28.7
L1	-2.89E+03	3.02E+03	-2.88E+03	3.01E+03
L3	-2.89E+03	3.02E+03	-2.88E+03	3.01E+03
L4	-2.11E+03	3.97E+03	-2.04E+03	3.92E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–768. Time history of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
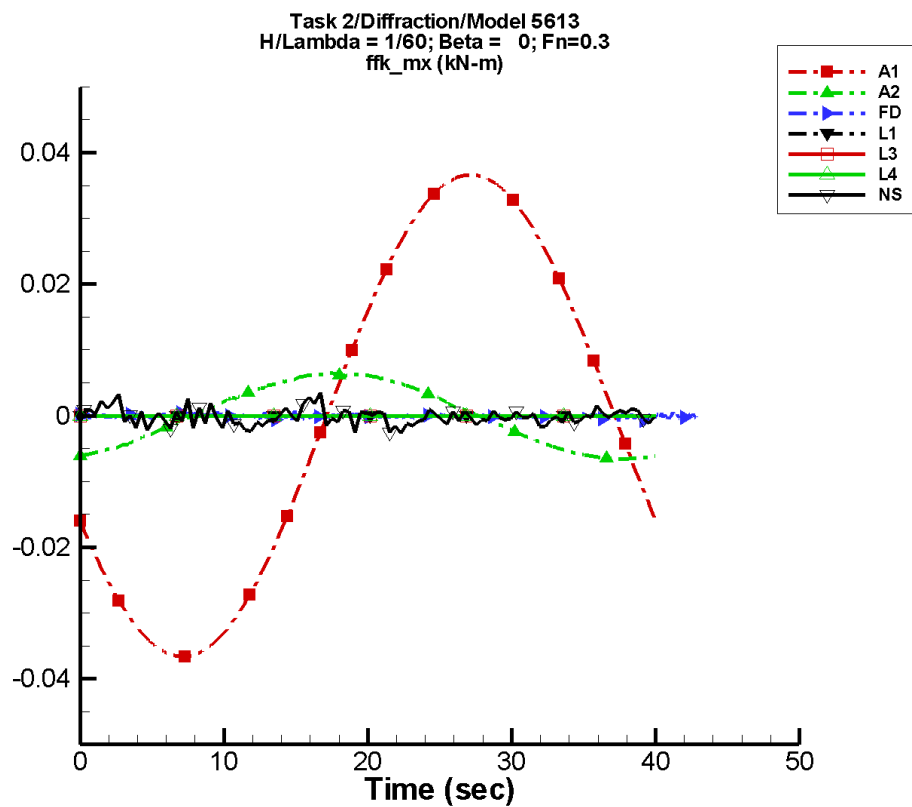
Table G–1535. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.48	4.58E+03	-130	2.76	170
A2	-1.48	4.58E+03	-130	2.76	170
FD	3.92E-03	43.5	21	1.81E-02	51
L1	316.	4.42E+03	-111	274.	174
L3	316.	4.42E+03	-112	274.	174
L4	1.17E+03	4.94E+03	-111	815.	78
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1536. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
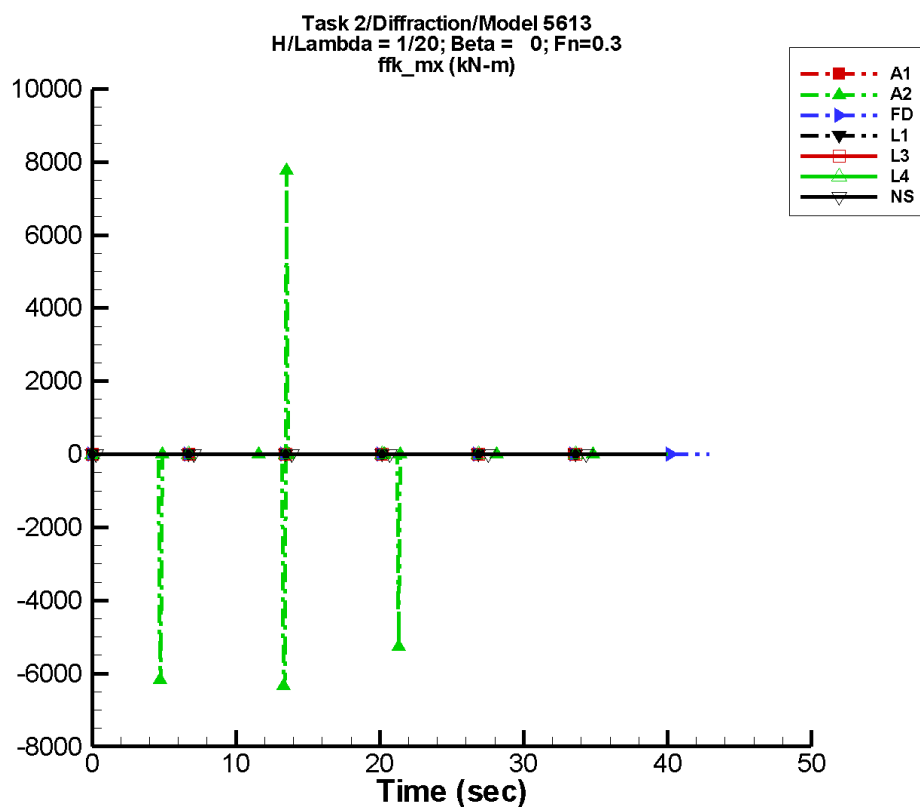
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-4.61E+03	4.60E+03	-4.56E+03	4.55E+03
A2	-4.61E+03	4.60E+03	-4.56E+03	4.55E+03
FD	-43.5	43.5	-43.1	43.0
L1	-4.29E+03	4.60E+03	-4.27E+03	4.59E+03
L3	-4.29E+03	4.59E+03	-4.28E+03	4.58E+03
L4	-3.46E+03	6.94E+03	-3.29E+03	6.83E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–769. Time history of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
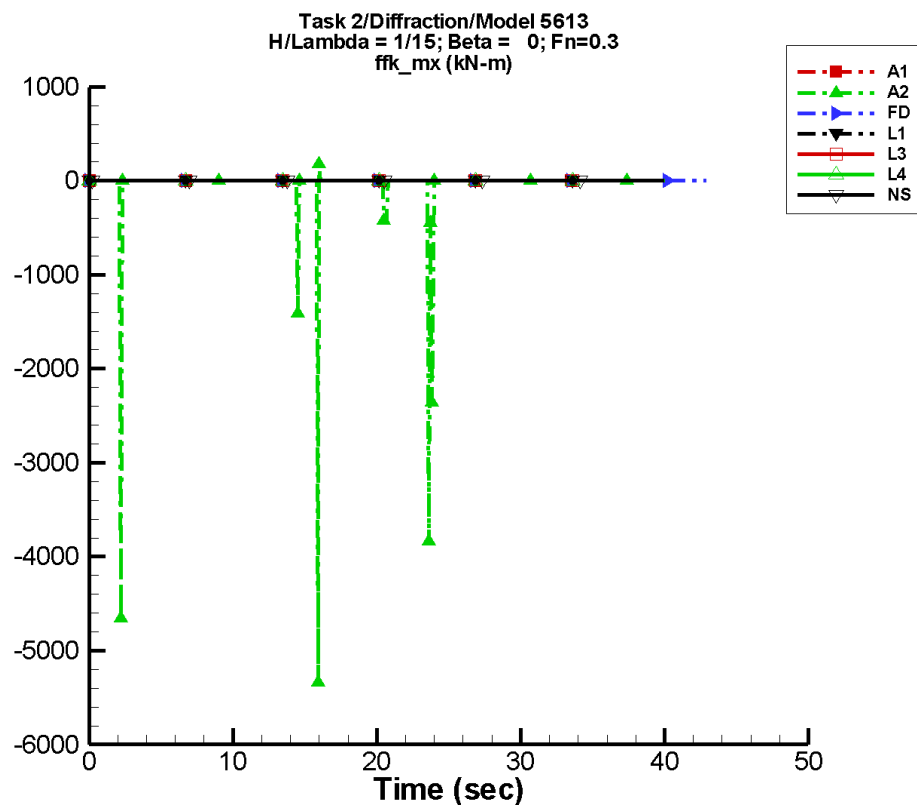
Table G–1537. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.992	190.	157	0.664	130
A2	0.992	190.	157	0.664	130
FD	-1.15E-09	3.54E-06	167	1.57E-09	-164
L1	11.6	231.	-158	10.3	118
L3	11.6	231.	-159	10.3	118
L4	-6.61	214.	-159	50.7	133
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1538. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-191.	192.	-189.	190.
A2	-191.	192.	-189.	190.
FD	-3.54E-06	3.54E-06	-3.50E-06	3.55E-06
L1	-230.	233.	-229.	232.
L3	-230.	233.	-229.	232.
L4	-275.	197.	-273.	168.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–770. Time history of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
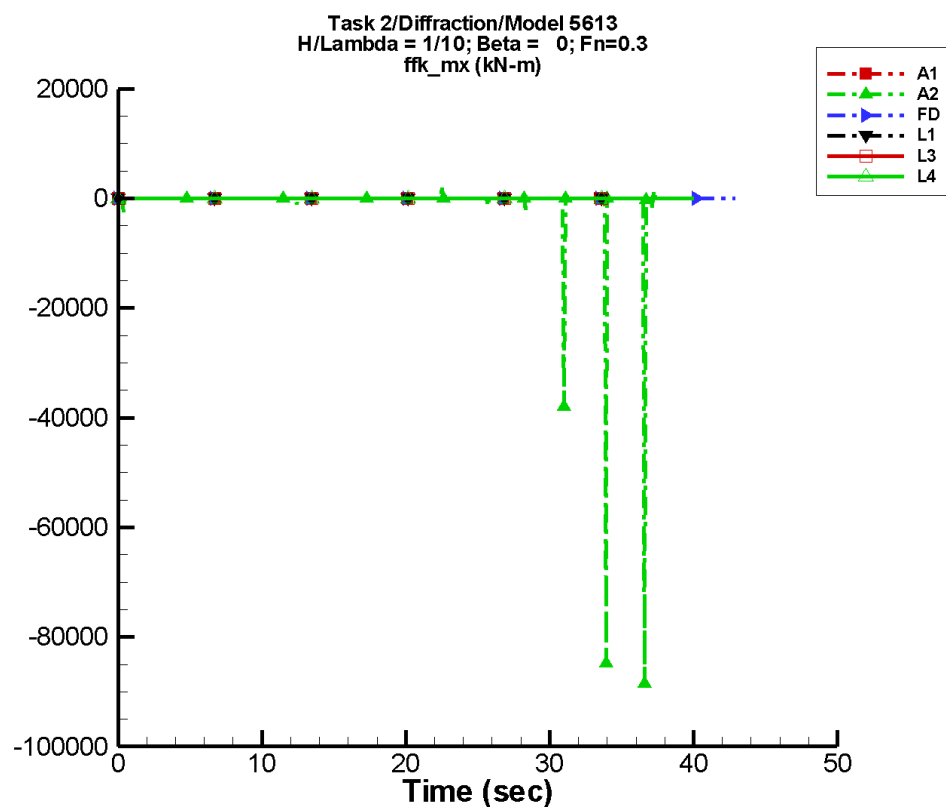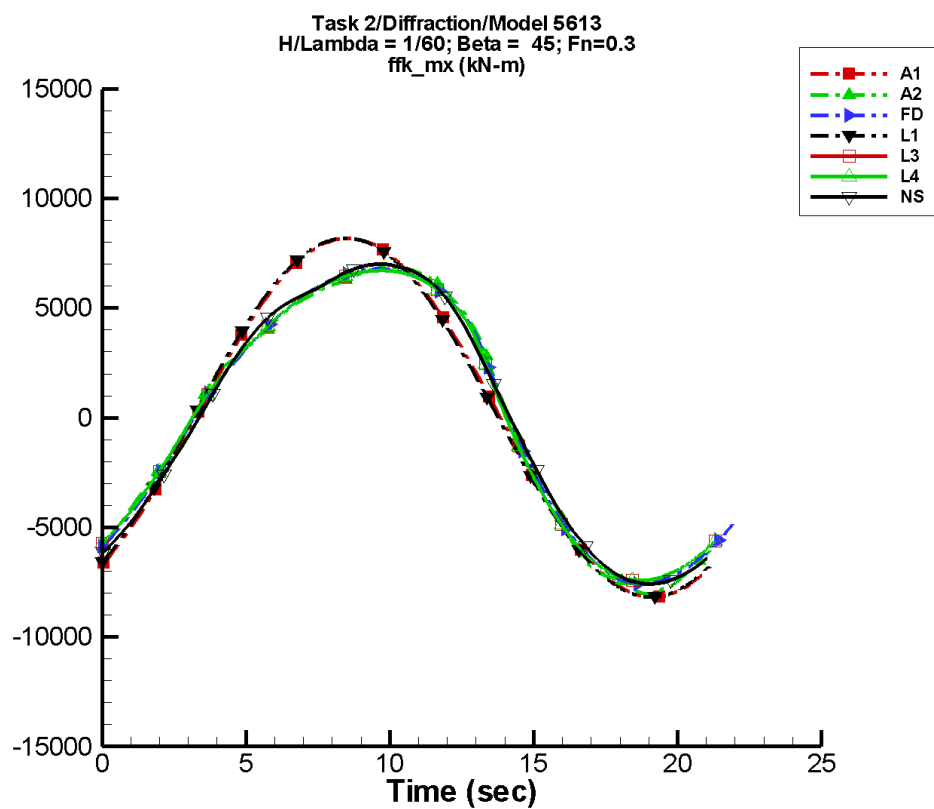
Table G–1539. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	2.98	572.	157	2.00	130
A2	2.98	572.	157	2.00	130
FD	-3.44E-09	1.06E-05	167	4.72E-09	-164
L1	103.	694.	-158	91.8	118
L3	103.	694.	-159	91.8	118
L4	-57.5	587.	-155	397.	127
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1540. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-574.	578.	-568.	572.
A2	-574.	578.	-568.	572.
FD	-1.06E-05	1.06E-05	-1.05E-05	1.06E-05
L1	-680.	714.	-676.	712.
L3	-680.	712.	-677.	710.
L4	-1.19E+03	562.	-1.07E+03	513.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–771. Time history of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1541. Coefficients of the Fourier fit $a_0 + a_1 \sin\left(\omega t + \Phi_1\right) + a_2 \sin\left(2\omega t + \Phi_2\right) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

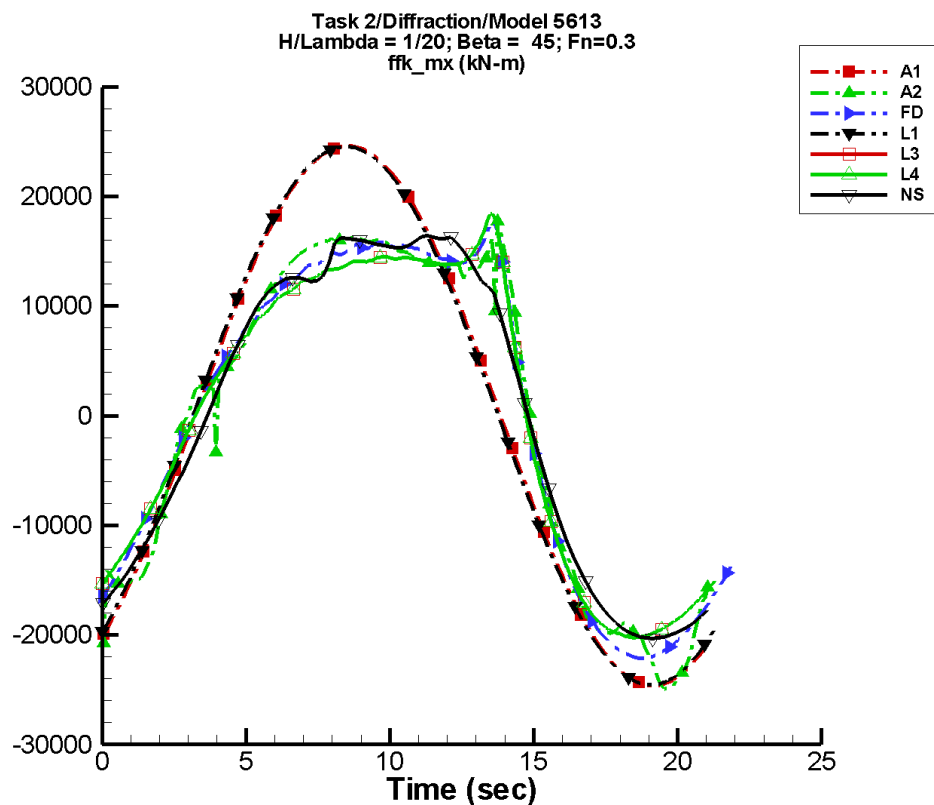| Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	3.98	763.	157	2.67	130
A2	3.98	763.	157	2.67	130
FD	-4.59E-09	1.42E-05	167	6.29E-09	-164
L1	184.	926.	-158	163.	118
L3	184.	926.	-159	163.	118
L4	-187.	829.	-156	733.	125
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1542. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-767.	772.	-759.	764.
A2	-767.	772.	-759.	764.
FD	-1.42E-05	1.42E-05	-1.40E-05	1.42E-05
L1	-900.	966.	-895.	964.
L3	-901.	961.	-896.	960.
L4	-1.96E+03	863.	-1.82E+03	702.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–772. Time history of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
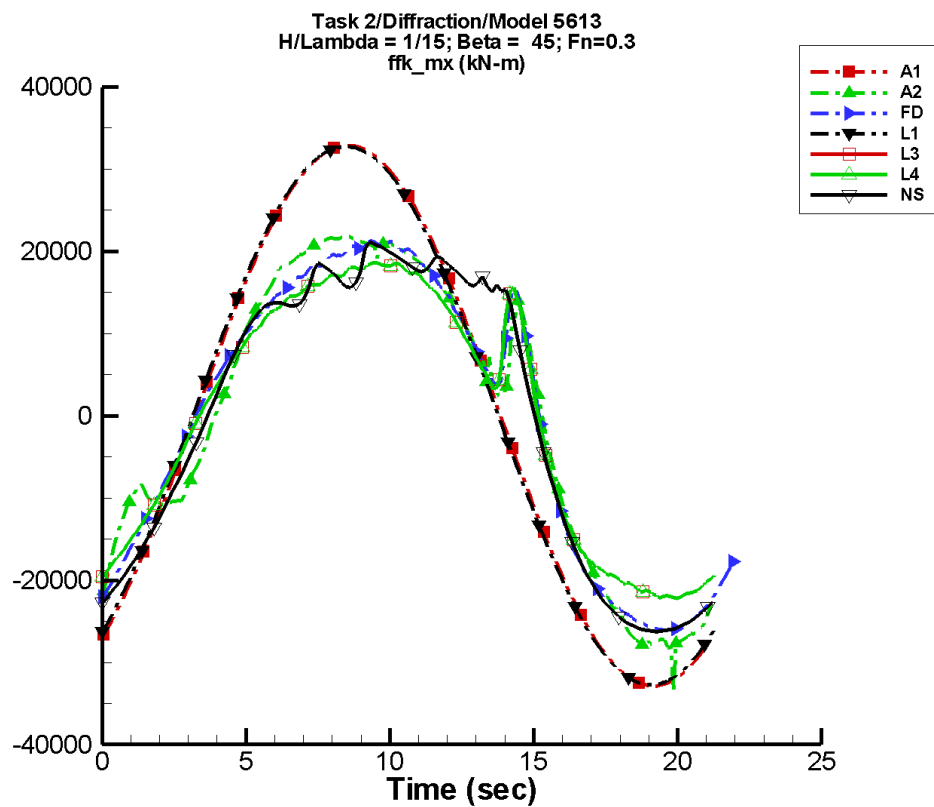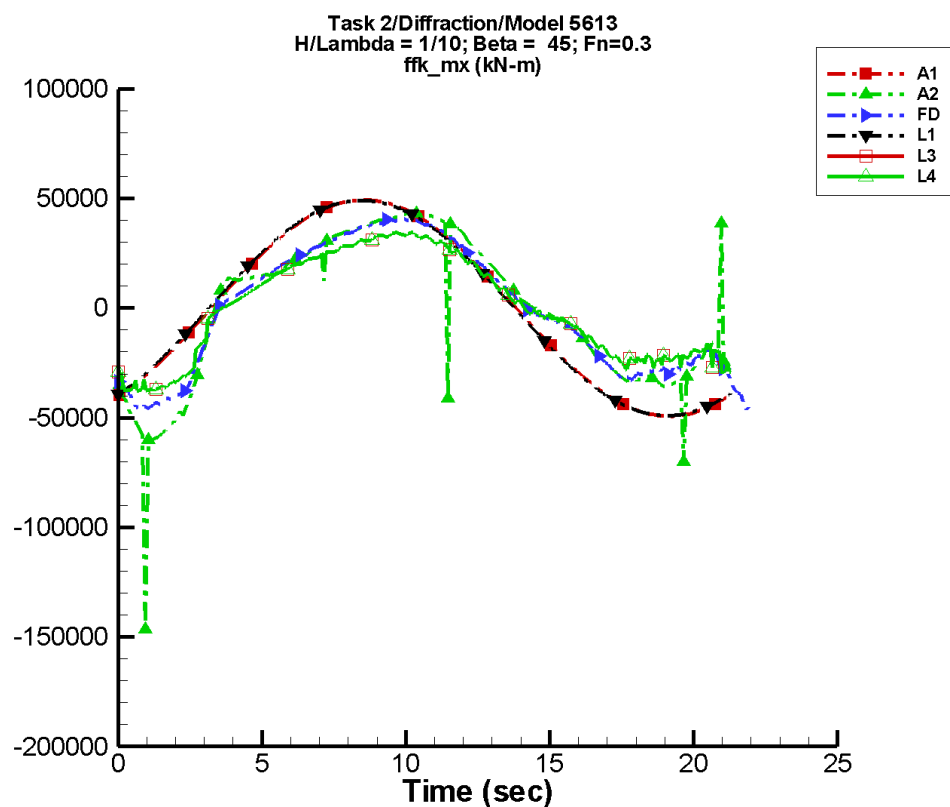
Table G–1543. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	5.98	1.14E+03	157	4.00	130
A2	5.98	1.14E+03	157	4.00	130
FD	-6.88E-09	2.12E-05	167	9.44E-09	-164
L1	413.	1.39E+03	-158	366.	118
L3	413.	1.39E+03	-159	366.	118
L4	-564.	1.70E+03	-155	1.66E+03	125
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1544. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.15E+03	1.16E+03	-1.14E+03	1.15E+03
A2	-1.15E+03	1.16E+03	-1.14E+03	1.15E+03
FD	-2.12E-05	2.12E-05	-2.10E-05	2.13E-05
L1	-1.33E+03	1.53E+03	-1.32E+03	1.53E+03
L3	-1.33E+03	1.52E+03	-1.32E+03	1.51E+03
L4	-4.61E+03	1.47E+03	-4.23E+03	1.24E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–773. Time history of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
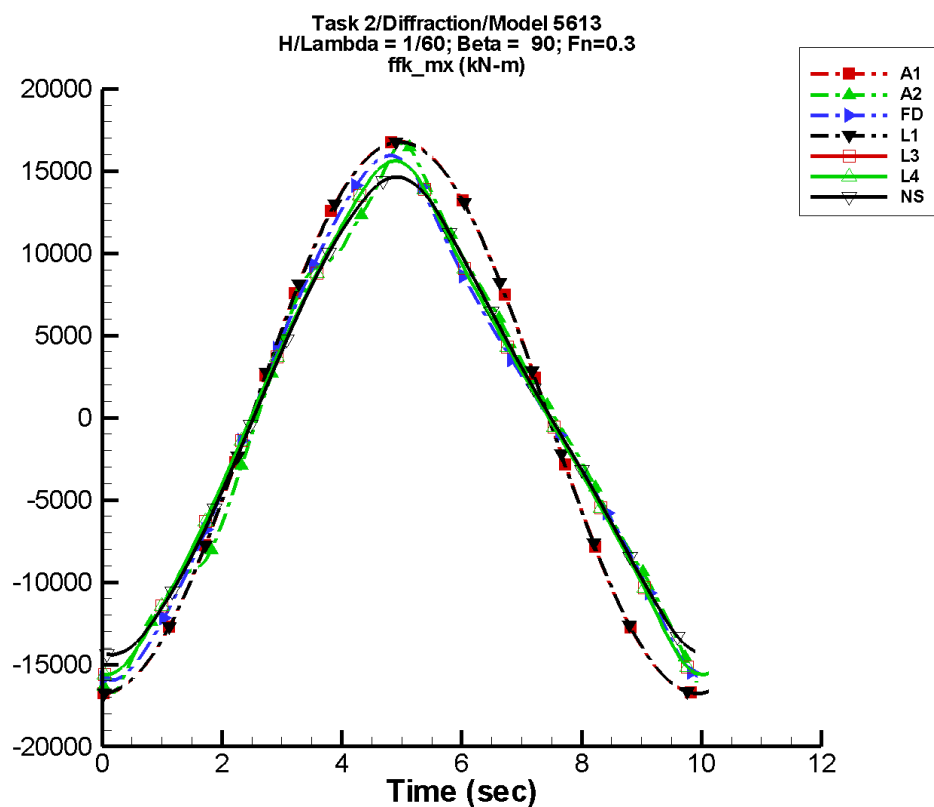
Table G–1545. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.799	719.	44	0.254	68
A2	0.799	719.	44	0.254	68
FD	-6.02E-03	14.5	148	6.70E-03	177
L1	6.53	552.	65	10.3	-75
L3	6.54	551.	64	10.3	-75
L4	-31.4	523.	63	53.6	-147
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1546. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-721.	727.	-714.	720.
A2	-721.	727.	-714.	720.
FD	-14.5	14.5	-14.4	14.4
L1	-550.	554.	-548.	552.
L3	-549.	554.	-547.	553.
L4	-615.	431.	-597.	425.
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 135; Fn=0.0
fdif_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–774. Time history of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
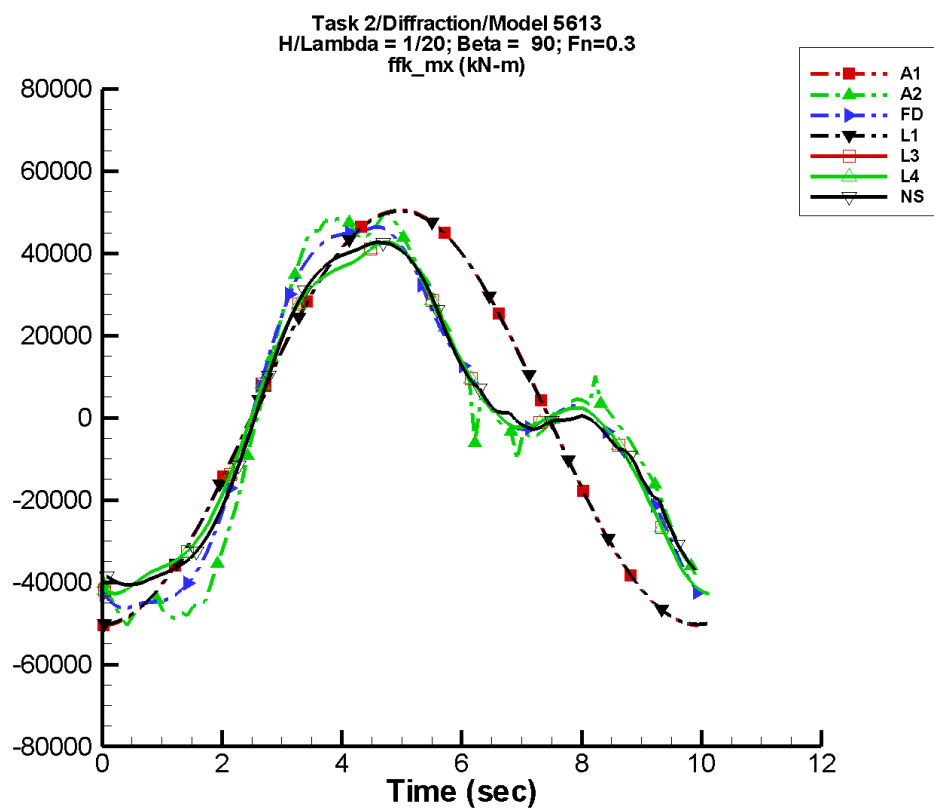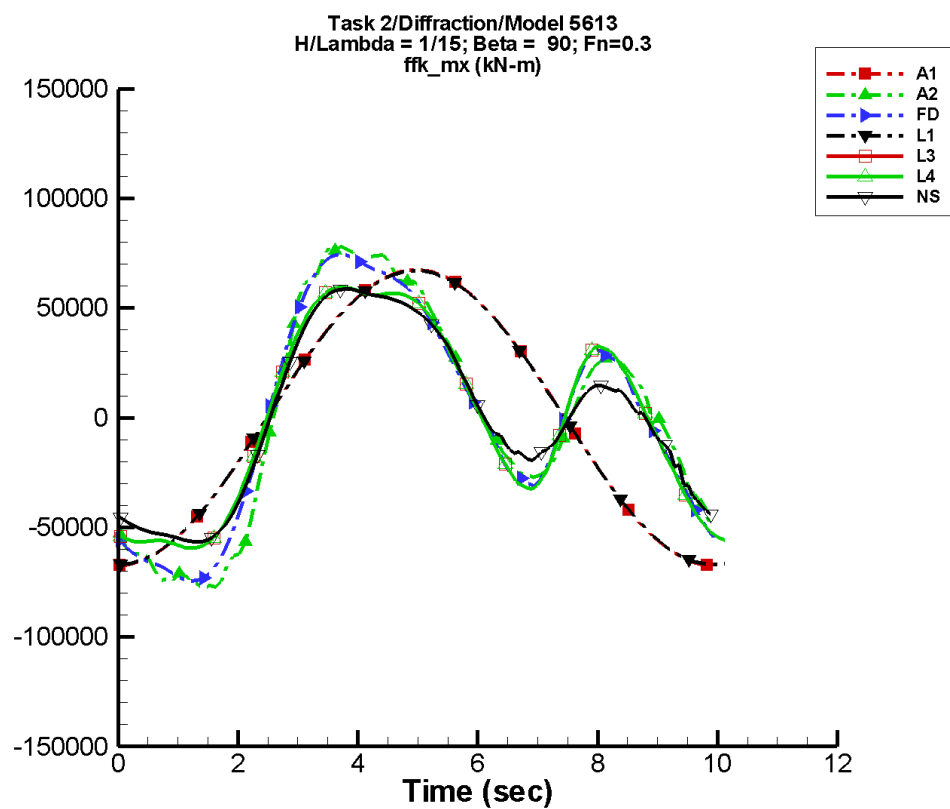
Table G–1547. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	2.40	2.16E+03	44	0.765	68
A2	2.40	2.16E+03	44	0.765	68
FD	-1.81E-02	43.5	148	2.01E-02	177
L1	61.9	1.65E+03	65	94.8	-77
L3	61.9	1.65E+03	64	94.8	-77
L4	-319.	1.48E+03	57	469.	-126
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1548. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.17E+03	2.19E+03	-2.15E+03	2.17E+03
A2	-2.17E+03	2.19E+03	-2.15E+03	2.17E+03
FD	-43.5	43.5	-43.1	43.1
L1	-1.64E+03	1.68E+03	-1.64E+03	1.68E+03
L3	-1.64E+03	1.69E+03	-1.63E+03	1.68E+03
L4	-2.18E+03	1.11E+03	-2.15E+03	1.04E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–775. Time history of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
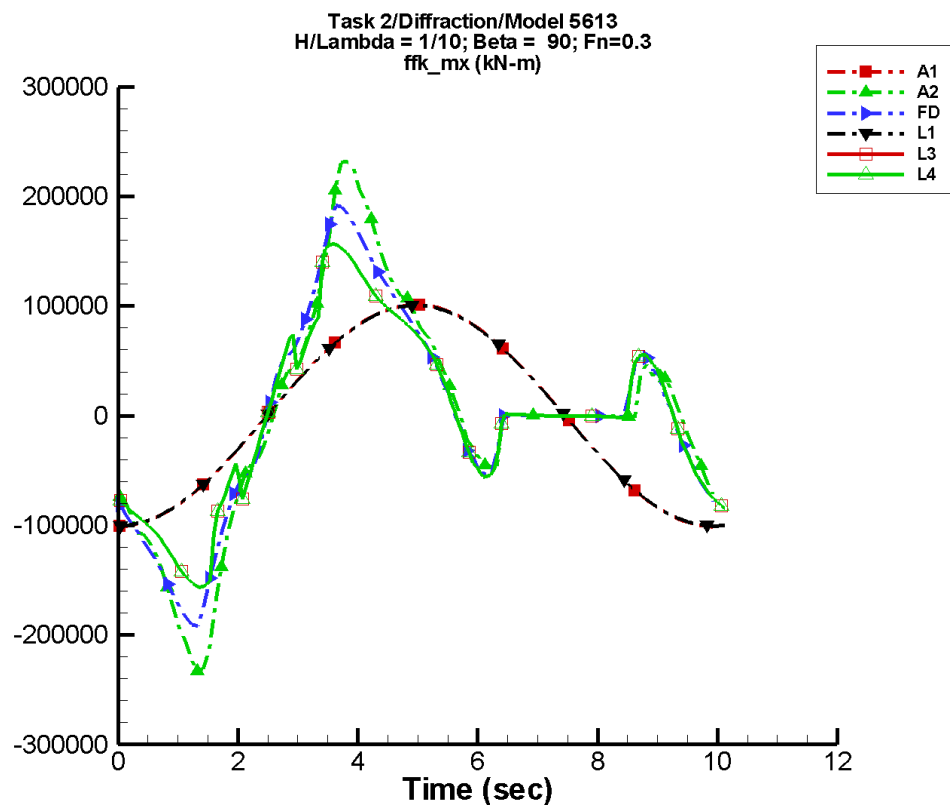
Table G–1549. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	3.21	2.89E+03	44	1.02	68
A2	3.21	2.89E+03	44	1.02	68
FD	-2.41E-02	58.0	148	2.68E-02	177
L1	111.	2.21E+03	65	169.	-77
L3	111.	2.21E+03	64	169.	-77
L4	-543.	2.08E+03	55	731.	-123
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1550. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.90E+03	2.92E+03	-2.87E+03	2.89E+03
A2	-2.90E+03	2.92E+03	-2.87E+03	2.89E+03
FD	-58.0	58.0	-57.4	57.4
L1	-2.19E+03	2.27E+03	-2.18E+03	2.26E+03
L3	-2.18E+03	2.27E+03	-2.17E+03	2.26E+03
L4	-3.21E+03	1.53E+03	-3.16E+03	1.44E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–776. Time history of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
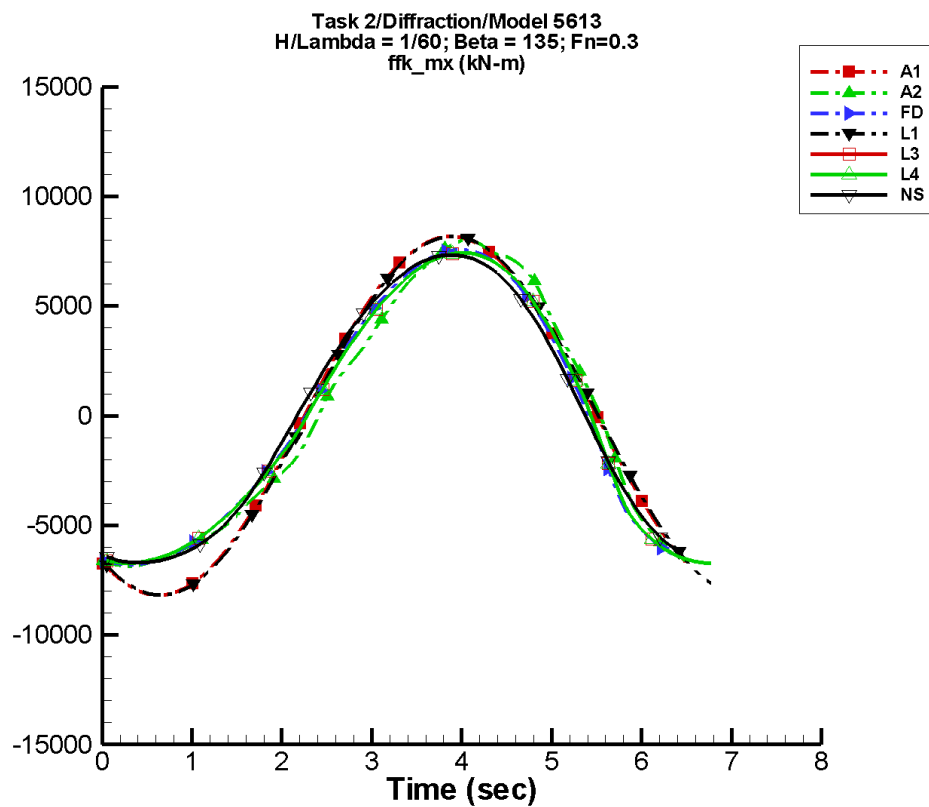
Table G–1551. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	4.81	4.33E+03	44	1.53	68
A2	4.81	4.33E+03	44	1.53	68
FD	-3.61E-02	87.0	148	4.02E-02	177
L1	251.	3.31E+03	65	381.	-77
L3	251.	3.31E+03	64	381.	-77
L4	-853.	3.57E+03	60	1.26E+03	-133
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1552. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-4.34E+03	4.38E+03	-4.30E+03	4.34E+03
A2	-4.34E+03	4.38E+03	-4.30E+03	4.34E+03
FD	-87.0	87.0	-86.1	86.1
L1	-3.29E+03	3.47E+03	-3.27E+03	3.46E+03
L3	-3.28E+03	3.48E+03	-3.26E+03	3.47E+03
L4	-5.71E+03	2.62E+03	-5.39E+03	2.25E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–777. Time history of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
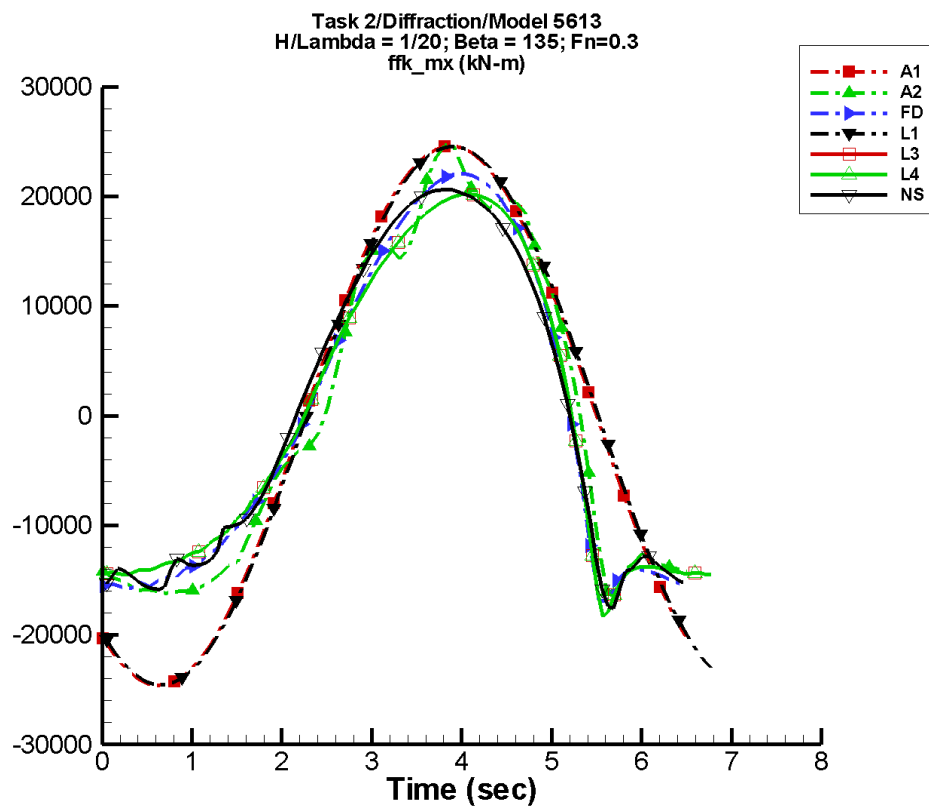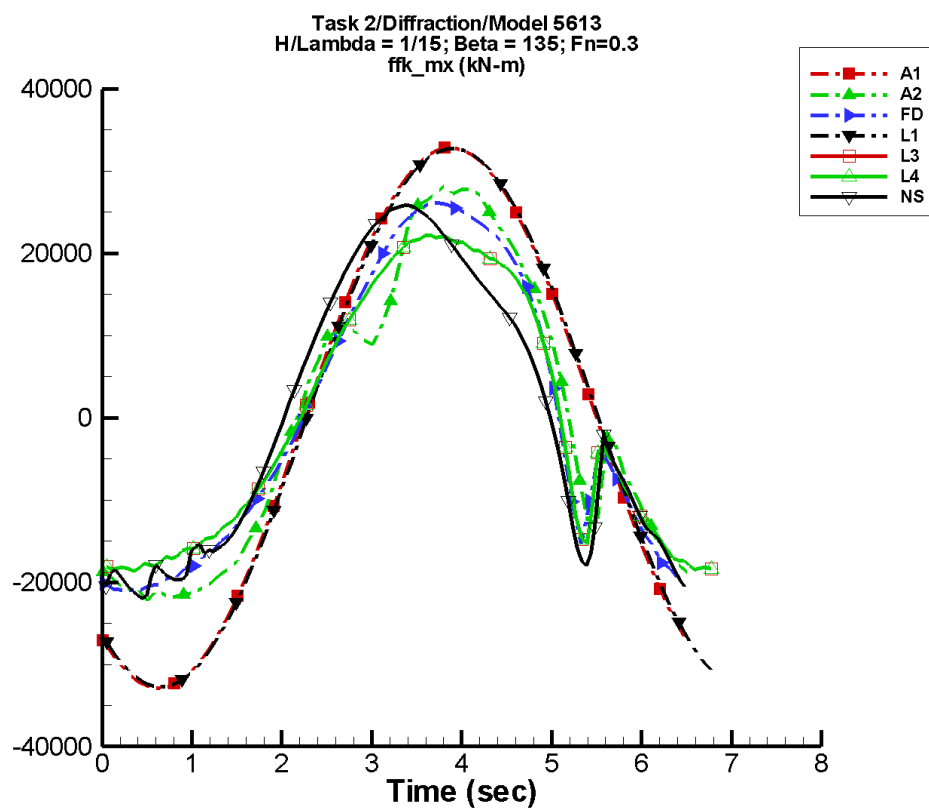
Table G–1553. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.346	706.	36	0.291	14
A2	0.346	706.	36	0.291	14
FD	5.27E-03	20.0	-3	8.68E-03	26
L1	12.5	576.	55	2.66	-127
L3	12.6	576.	54	2.66	-127
L4	-12.8	543.	55	41.2	136
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1554. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-708.	712.	-700.	704.
A2	-708.	712.	-700.	704.
FD	-20.0	20.0	-19.8	19.8
L1	-566.	586.	-564.	584.
L3	-565.	586.	-563.	584.
L4	-580.	538.	-575.	532.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–778. Time history of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
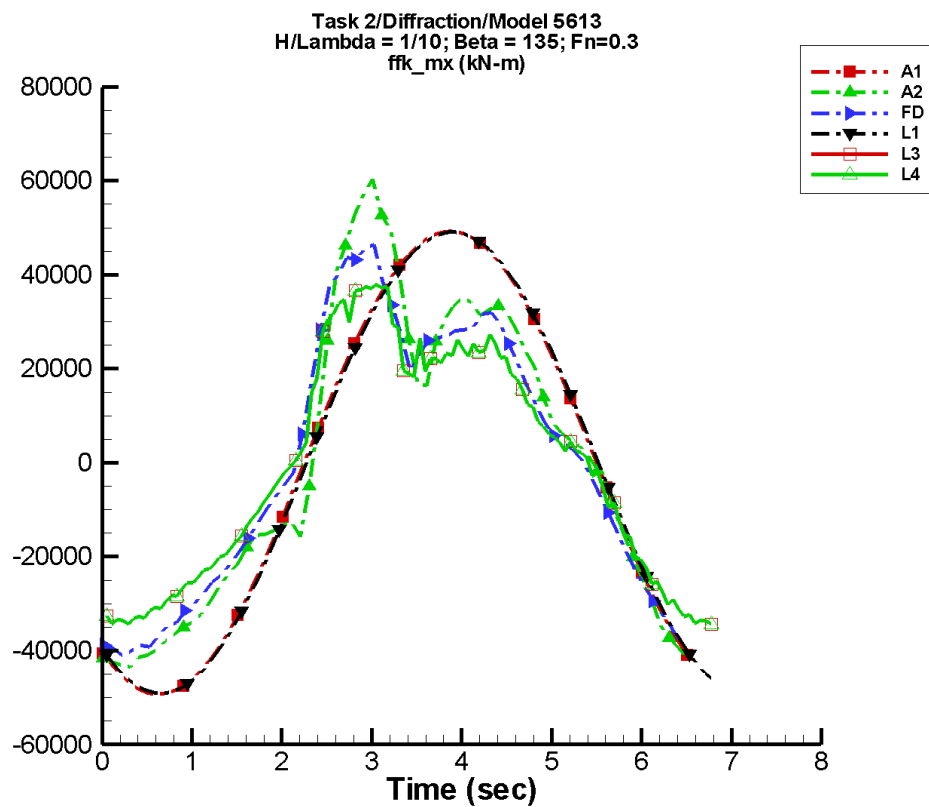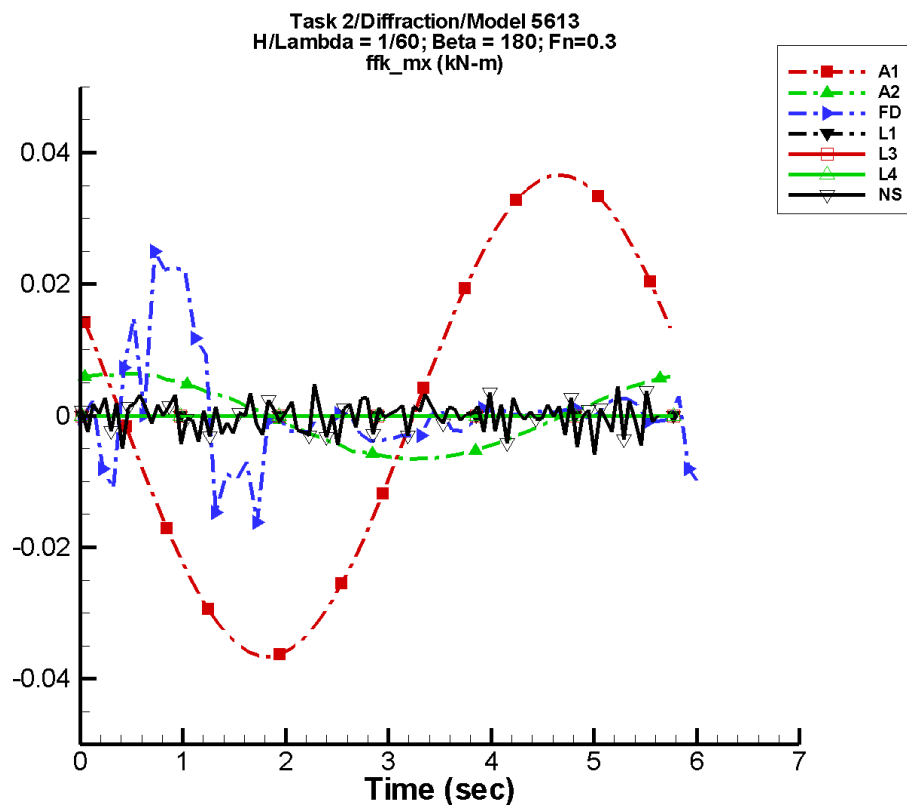
Table G–1555. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.04	2.12E+03	36	0.876	14
A2	1.04	2.12E+03	36	0.876	14
FD	1.58E-02	59.9	-3	2.60E-02	26
L1	114.	1.73E+03	55	26.6	-124
L3	114.	1.73E+03	54	26.6	-123
L4	-194.	1.36E+03	50	303.	175
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1556. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.13E+03	2.14E+03	-2.11E+03	2.12E+03
A2	-2.13E+03	2.14E+03	-2.11E+03	2.12E+03
FD	-59.9	59.9	-59.3	59.3
L1	-1.64E+03	1.82E+03	-1.63E+03	1.81E+03
L3	-1.63E+03	1.82E+03	-1.63E+03	1.82E+03
L4	-1.85E+03	1.12E+03	-1.84E+03	1.03E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–779. Time history of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1557. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.39	2.84E+03	36	1.17	14
A2	1.39	2.84E+03	36	1.17	14
FD	2.11E-02	79.9	-3	3.47E-02	26
L1	204.	2.30E+03	55	47.9	-123
L3	204.	2.30E+03	54	47.9	-123
L4	-328.	1.80E+03	48	460.	179
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1558. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

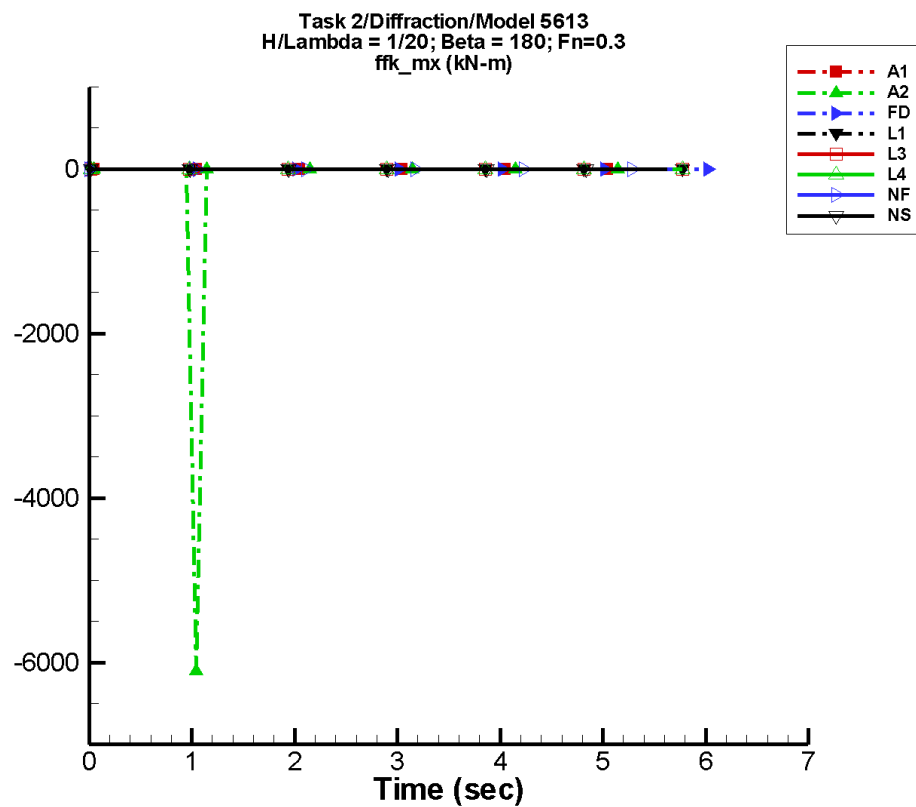| Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.84E+03	2.86E+03	-2.81E+03	2.83E+03
A2	-2.84E+03	2.86E+03	-2.81E+03	2.83E+03
FD	-79.9	79.9	-79.1	79.1
L1	-2.14E+03	2.47E+03	-2.13E+03	2.46E+03
L3	-2.14E+03	2.47E+03	-2.13E+03	2.46E+03
L4	-2.62E+03	1.20E+03	-2.60E+03	1.09E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–780. Time history of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
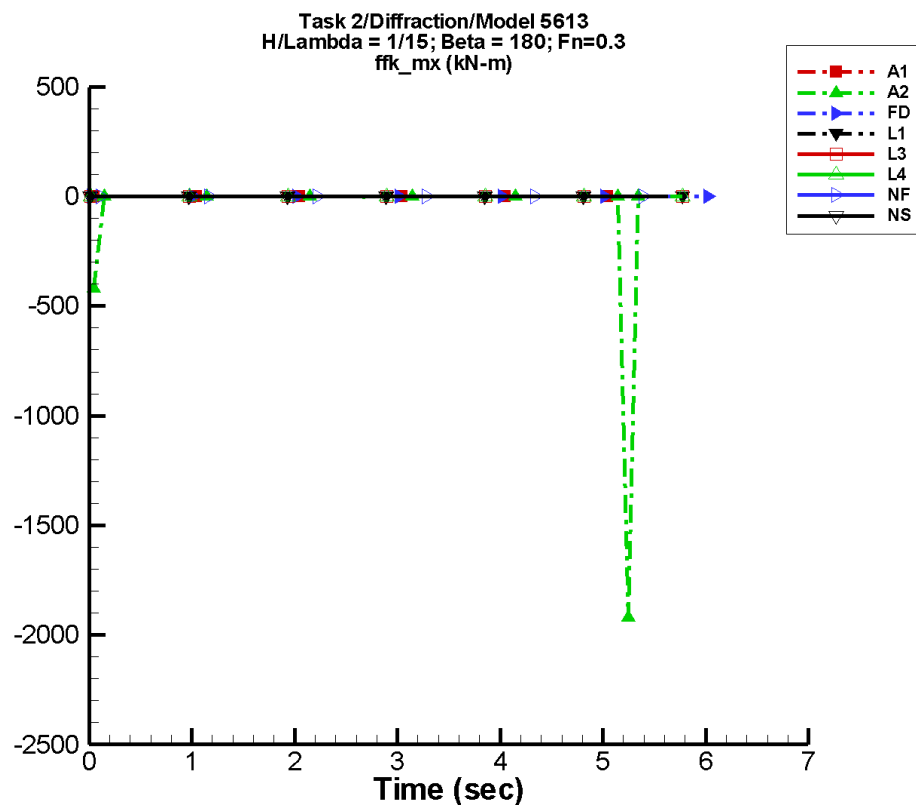
Table G–1559. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	2.09	4.25E+03	36	1.75	14
A2	2.09	4.25E+03	36	1.75	14
FD	3.16E-02	120.	-3	5.21E-02	26
L1	459.	3.46E+03	55	109.	-123
L3	459.	3.46E+03	54	109.	-123
L4	-505.	2.91E+03	52	825.	175
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1560. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-4.26E+03	4.29E+03	-4.22E+03	4.24E+03
A2	-4.26E+03	4.29E+03	-4.22E+03	4.24E+03
FD	-120.	120.	-119.	119.
L1	-3.09E+03	3.83E+03	-3.07E+03	3.82E+03
L3	-3.08E+03	3.83E+03	-3.07E+03	3.82E+03
L4	-4.80E+03	2.59E+03	-4.21E+03	2.02E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–781. Time history of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
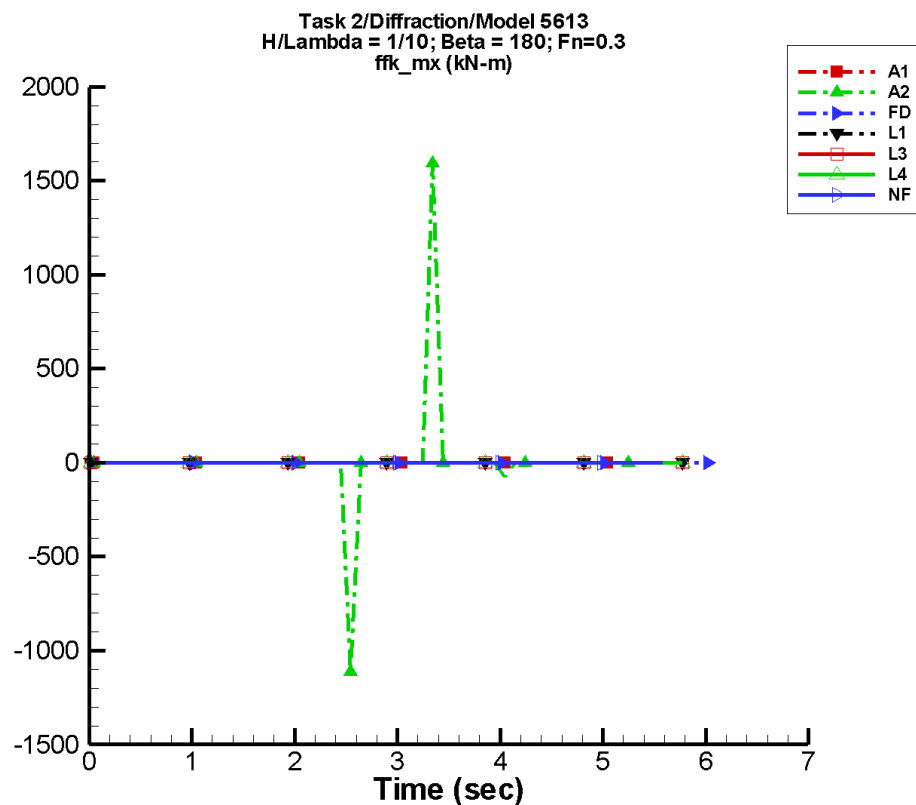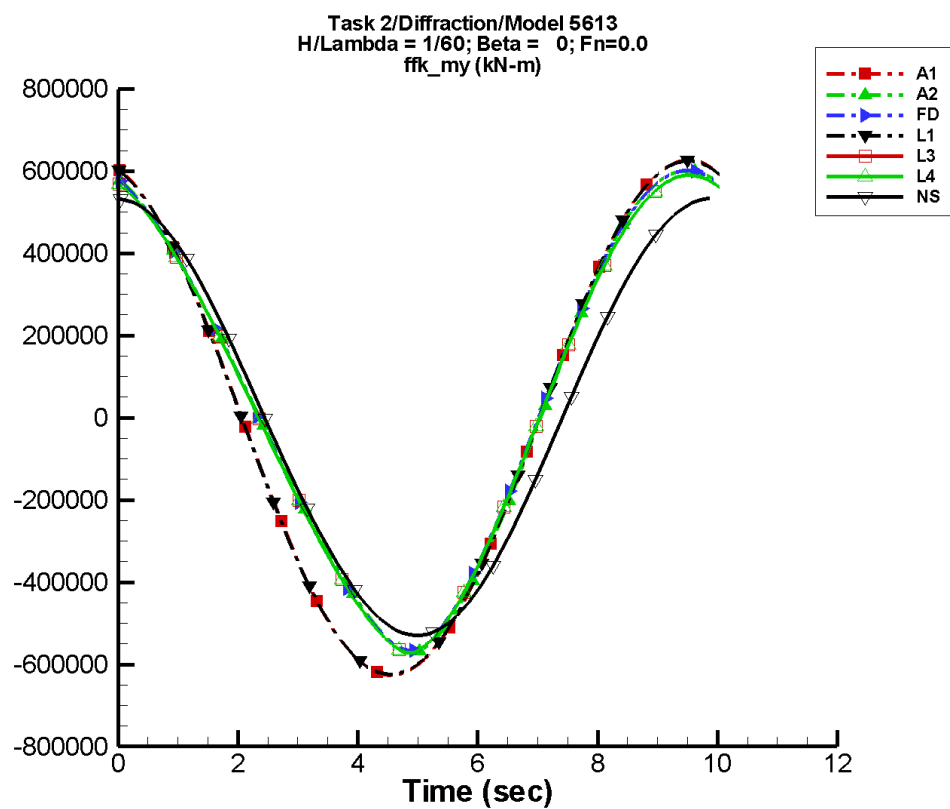
Table G–1561. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.239	674.	-82	2.48	-121
A2	0.239	674.	-82	2.48	-121
FD	-2.48E-04	15.5	110	9.34E-04	-119
L1	-26.0	450.	-100	3.15	-90
L3	-26.0	450.	-100	3.20	-89
L4	186.	720.	-160	174.	-86
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1562. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-677.	674.	-677.	673.
A2	-677.	674.	-677.	673.
FD	-15.5	15.5	-15.5	15.5
L1	-479.	421.	-479.	421.
L3	-479.	421.	-479.	421.
L4	-512.	1.14E+03	-489.	1.07E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.3
fdif_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–782. Time history of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1563. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.719	2.03E+03	-82	7.46	-121
A2	0.719	2.03E+03	-82	7.46	-121
FD	-7.41E-04	46.6	110	2.81E-03	-119
L1	97.0	1.35E+03	-100	26.8	-94
L3	97.0	1.35E+03	-100	26.9	-93
L4	610.	1.60E+03	-154	496.	-68
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1564. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
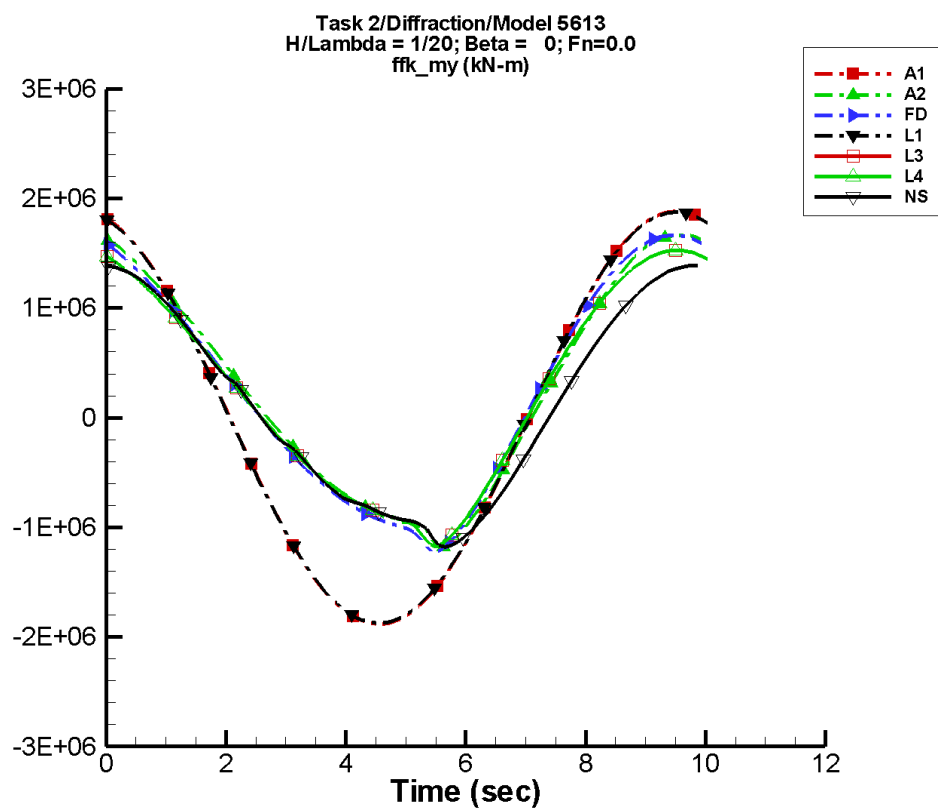
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.04E+03	2.03E+03	-2.04E+03	2.02E+03
A2	-2.04E+03	2.03E+03	-2.04E+03	2.02E+03
FD	-46.6	46.6	-46.5	46.5
L1	-1.28E+03	1.42E+03	-1.28E+03	1.42E+03
L3	-1.28E+03	1.42E+03	-1.28E+03	1.42E+03
L4	-991.	2.90E+03	-930.	2.72E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–783. Time history of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
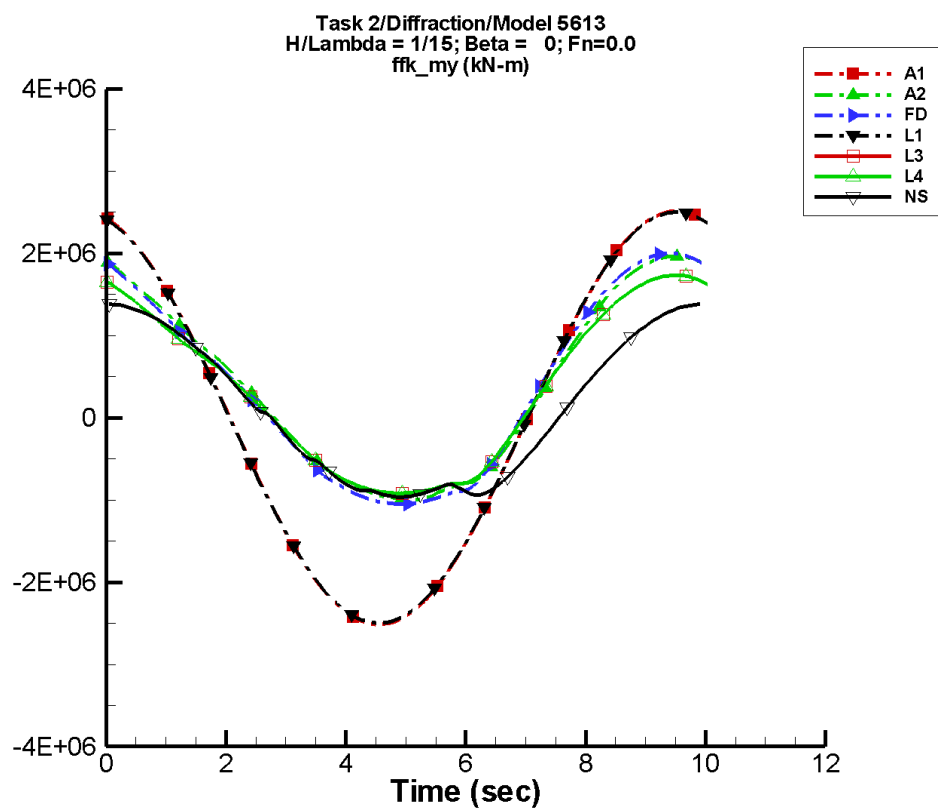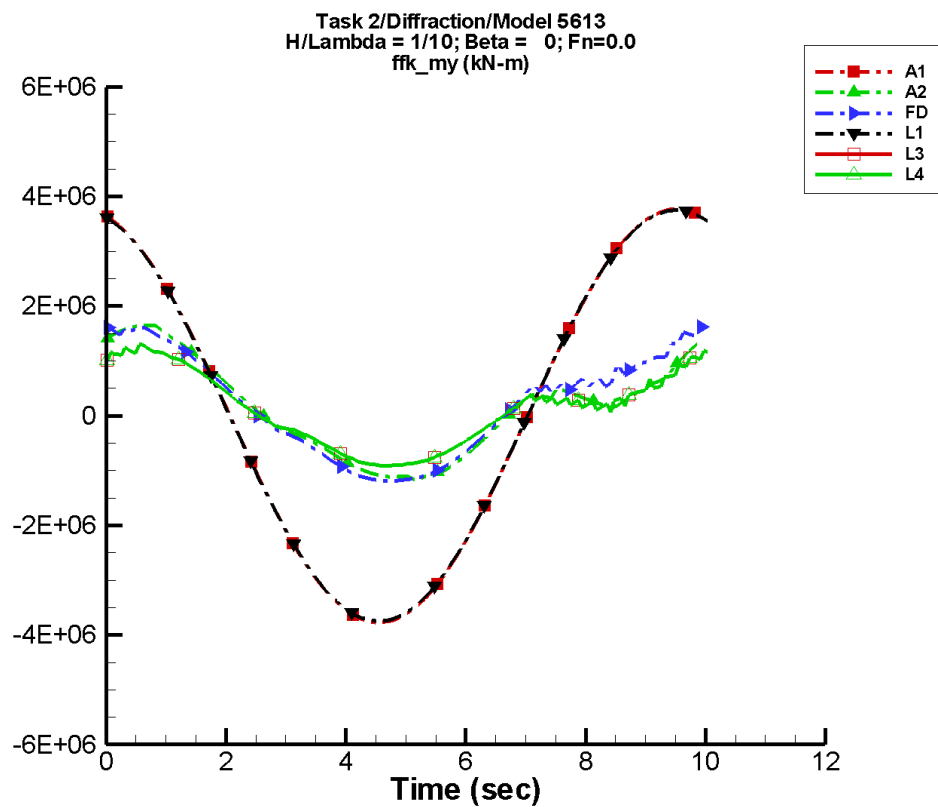
Table G–1565. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.960	2.71E+03	-82	9.95	-121
A2	0.960	2.71E+03	-82	9.95	-121
FD	-9.91E-04	62.1	110	3.74E-03	-119
L1	204.	1.80E+03	-100	47.3	-94
L3	204.	1.80E+03	-100	47.5	-94
L4	746.	1.91E+03	-150	599.	-65
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1566. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.72E+03	2.70E+03	-2.72E+03	2.70E+03
A2	-2.72E+03	2.70E+03	-2.72E+03	2.70E+03
FD	-62.1	62.1	-62.1	62.1
L1	-1.64E+03	1.96E+03	-1.64E+03	1.96E+03
L3	-1.64E+03	1.96E+03	-1.64E+03	1.96E+03
L4	-1.22E+03	3.72E+03	-1.15E+03	3.50E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta =   0; Fn=0.3
fdif_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–784. Time history of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
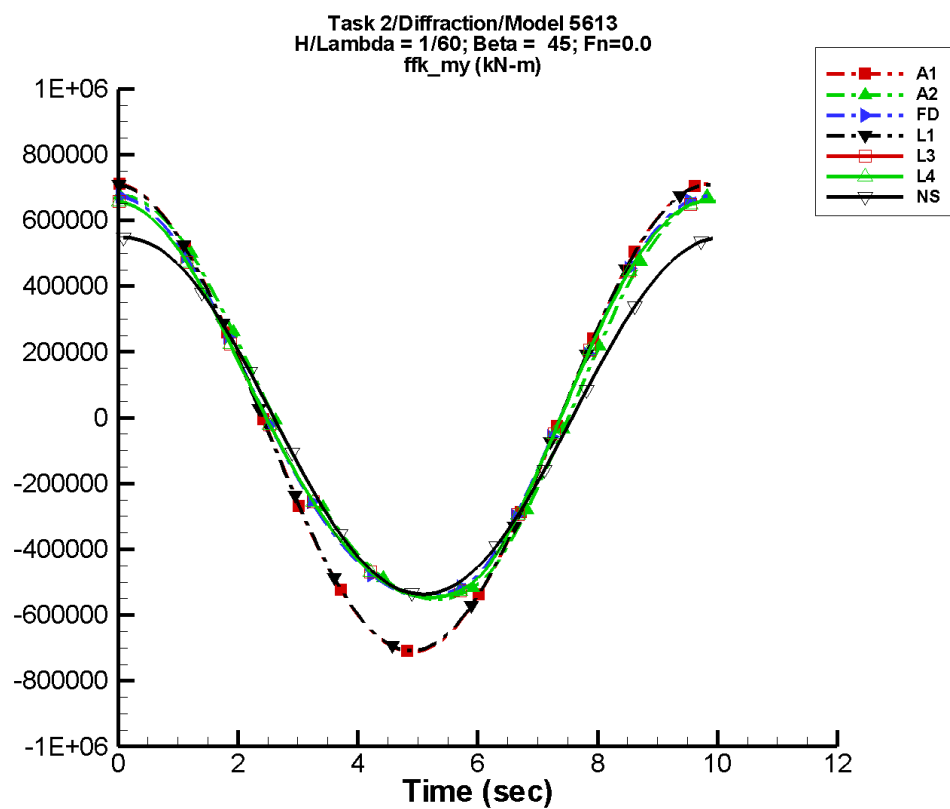
Table G–1567. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.44	4.06E+03	-82	14.9	-121
A2	1.44	4.06E+03	-82	14.9	-121
FD	-1.48E-03	93.1	110	5.62E-03	-119
L1	511.	2.70E+03	-100	106.	-94
L3	511.	2.70E+03	-100	106.	-94
L4	1.02E+03	2.47E+03	-130	800.	-40
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1568. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-4.08E+03	4.06E+03	-4.08E+03	4.05E+03
A2	-4.08E+03	4.06E+03	-4.08E+03	4.05E+03
FD	-93.2	93.1	-93.1	93.1
L1	-2.29E+03	3.11E+03	-2.29E+03	3.11E+03
L3	-2.29E+03	3.11E+03	-2.29E+03	3.11E+03
L4	-2.64E+03	5.17E+03	-1.81E+03	4.80E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–785. Time history of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1569. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
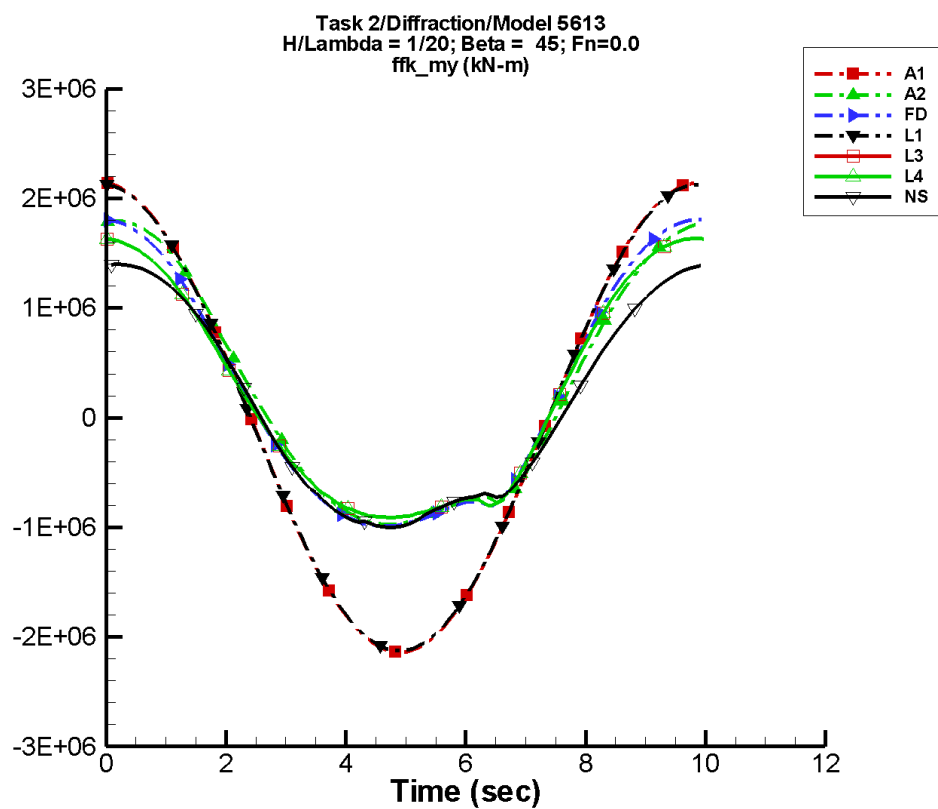
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	3.20	808.	-130	1.92	-169
A2	3.20	808.	-130	1.92	-169
FD	3.72E-03	12.8	37	6.06E-03	149
L1	-29.4	669.	-121	8.45	-125
L3	-29.4	669.	-121	8.47	-125
L4	199.	730.	174	178.	159
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1570. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-822.	823.	-808.	799.
A2	-822.	823.	-808.	799.
FD	-12.8	12.8	-12.8	12.8
L1	-706.	632.	-705.	631.
L3	-706.	632.	-705.	631.
L4	-707.	975.	-680.	974.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–786. Time history of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
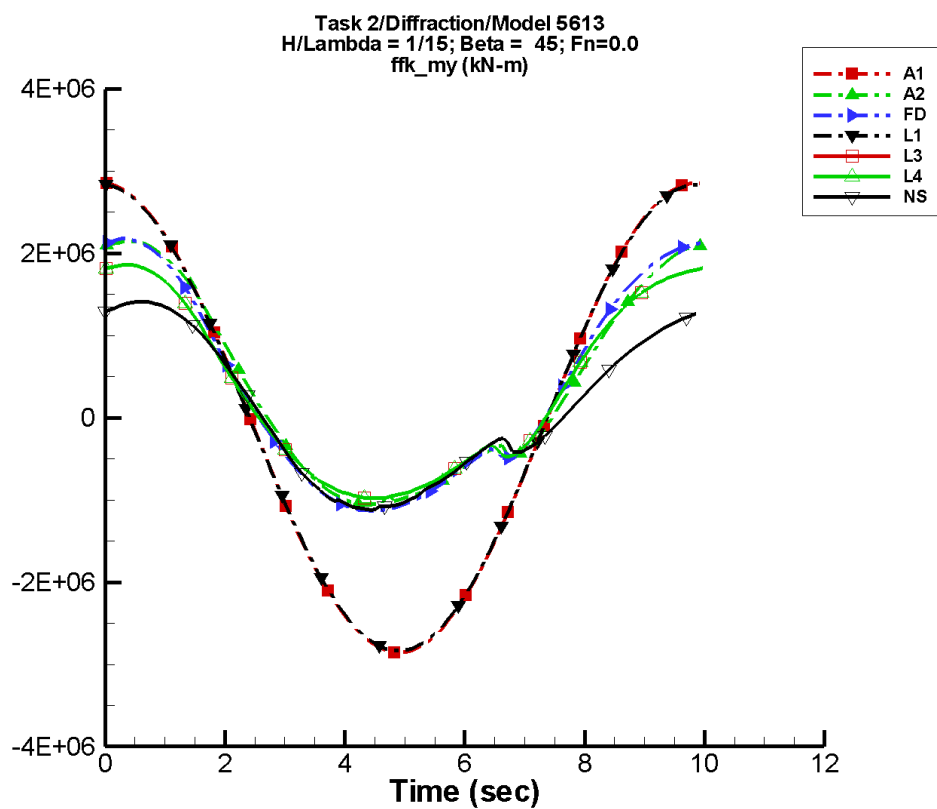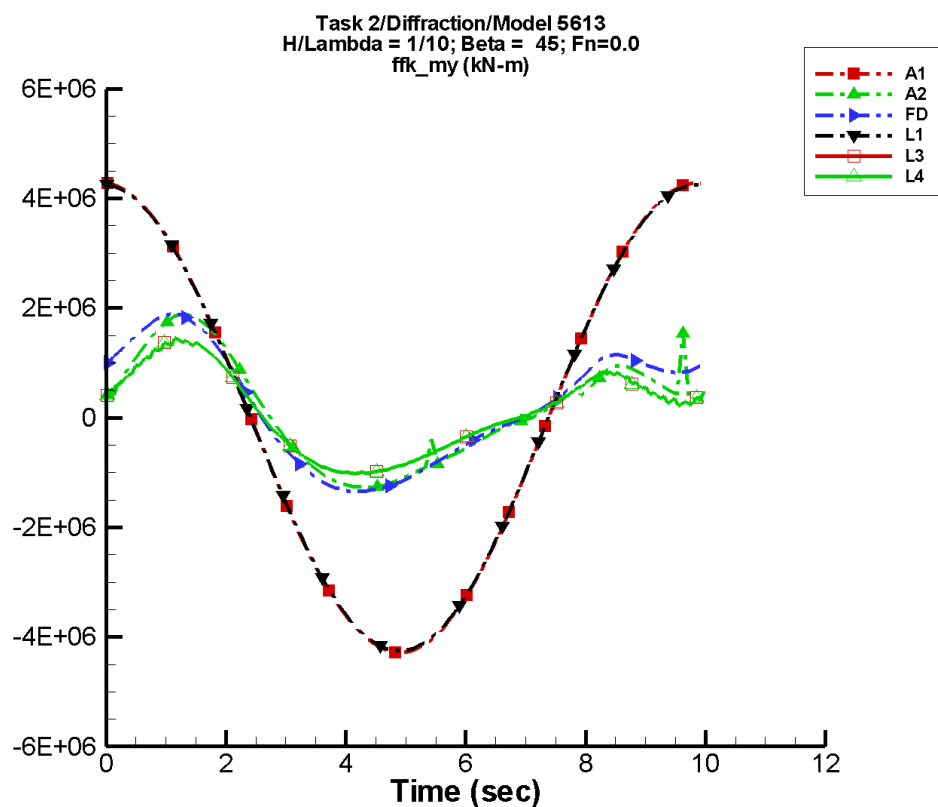
Table G–1571. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	9.64	2.43E+03	-130	5.77	-169
A2	9.64	2.43E+03	-130	5.77	-169
FD	1.12E-02	38.4	37	1.82E-02	149
L1	69.6	2.01E+03	-121	76.7	-125
L3	69.6	2.01E+03	-121	76.8	-125
L4	645.	1.79E+03	-175	418.	-178
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1572. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.47E+03	2.48E+03	-2.43E+03	2.40E+03
A2	-2.47E+03	2.48E+03	-2.43E+03	2.40E+03
FD	-38.4	38.4	-38.3	38.3
L1	-2.01E+03	2.01E+03	-2.00E+03	2.01E+03
L3	-2.01E+03	2.01E+03	-2.00E+03	2.01E+03
L4	-1.56E+03	2.74E+03	-1.52E+03	2.71E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–787. Time history of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
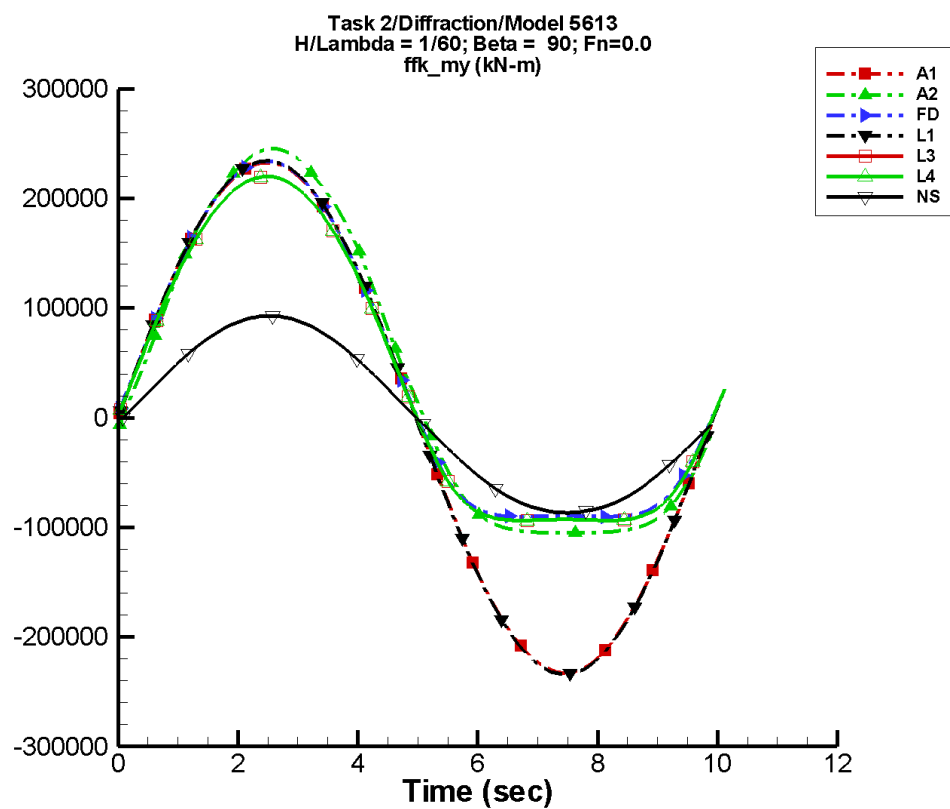
Table G–1573. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	12.9	3.24E+03	-130	7.71	-169
A2	12.9	3.24E+03	-130	7.71	-169
FD	1.49E-02	51.2	37	2.42E-02	149
L1	156.	2.67E+03	-121	136.	-125
L3	156.	2.67E+03	-121	137.	-126
L4	799.	2.23E+03	-168	587.	-171
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1574. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-3.30E+03	3.30E+03	-3.24E+03	3.21E+03
A2	-3.30E+03	3.30E+03	-3.24E+03	3.21E+03
FD	-51.2	51.2	-51.1	51.1
L1	-2.64E+03	2.71E+03	-2.64E+03	2.71E+03
L3	-2.64E+03	2.71E+03	-2.64E+03	2.71E+03
L4	-2.11E+03	3.65E+03	-2.03E+03	3.61E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–788. Time history of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1575. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
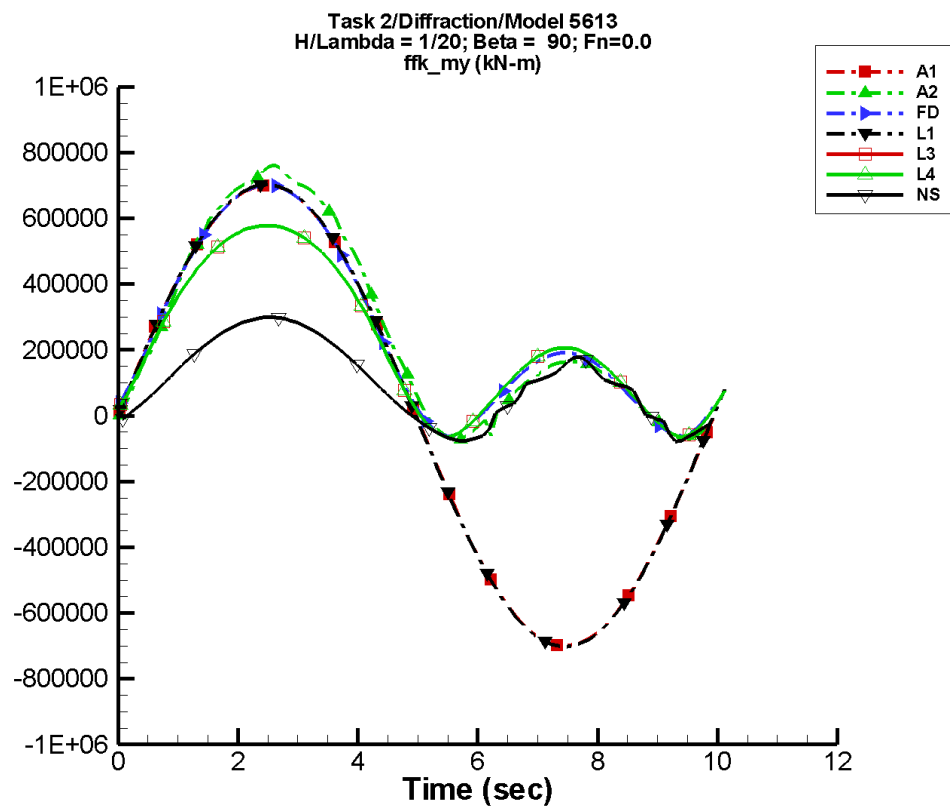
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	19.3	4.86E+03	-130	11.6	-169
A2	19.3	4.86E+03	-130	11.6	-169
FD	2.24E-02	76.7	37	3.63E-02	149
L1	404.	4.01E+03	-121	307.	-126
L3	404.	4.01E+03	-121	308.	-126
L4	1.11E+03	3.05E+03	-149	682.	-170
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1576. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-4.95E+03	4.96E+03	-4.86E+03	4.82E+03
A2	-4.95E+03	4.96E+03	-4.86E+03	4.82E+03
FD	-76.7	76.7	-76.6	76.6
L1	-3.89E+03	4.15E+03	-3.89E+03	4.15E+03
L3	-3.89E+03	4.16E+03	-3.89E+03	4.15E+03
L4	-4.89E+03	5.20E+03	-2.64E+03	4.71E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–789. Time history of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
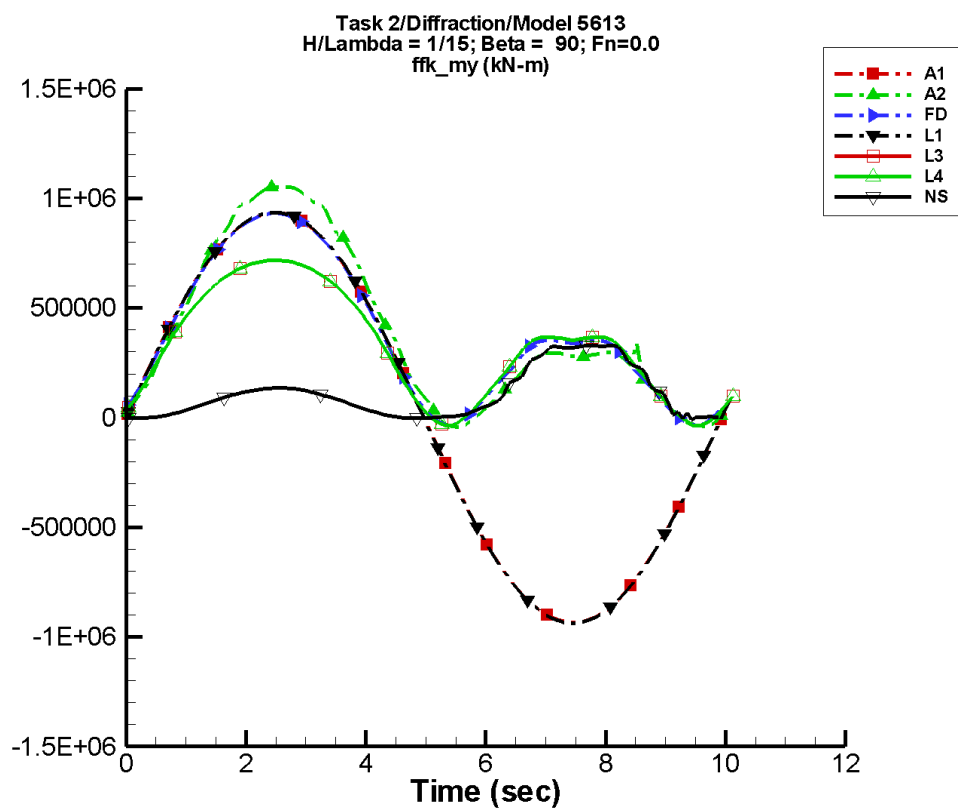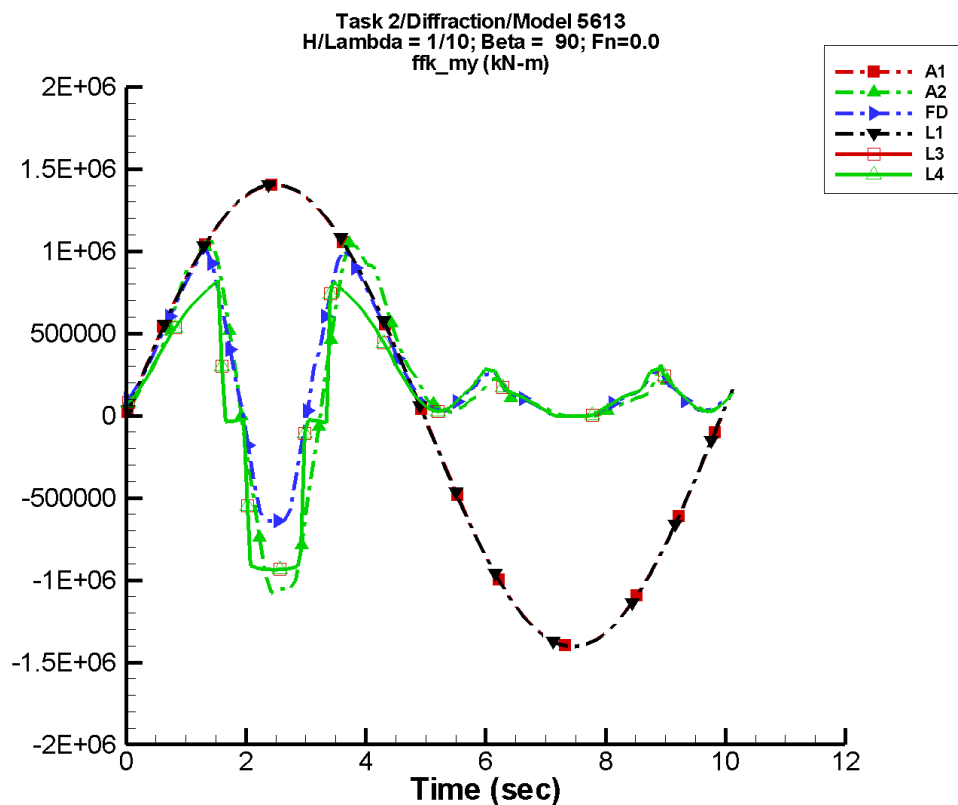
Table G–1577. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	9.63E-02	358.	160	1.01	-76
A2	9.63E-02	358.	160	1.01	-76
FD	-1.35E-09	3.63E-06	158	1.65E-09	-173
L1	-36.6	297.	174	20.4	79
L3	-36.6	298.	173	20.4	79
L4	193.	301.	-25	179.	-109
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1578. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-365.	366.	-361.	362.
A2	-365.	366.	-361.	362.
FD	-3.63E-06	3.63E-06	-3.60E-06	3.60E-06
L1	-354.	240.	-353.	240.
L3	-355.	241.	-353.	240.
L4	-146.	666.	-131.	659.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–790. Time history of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
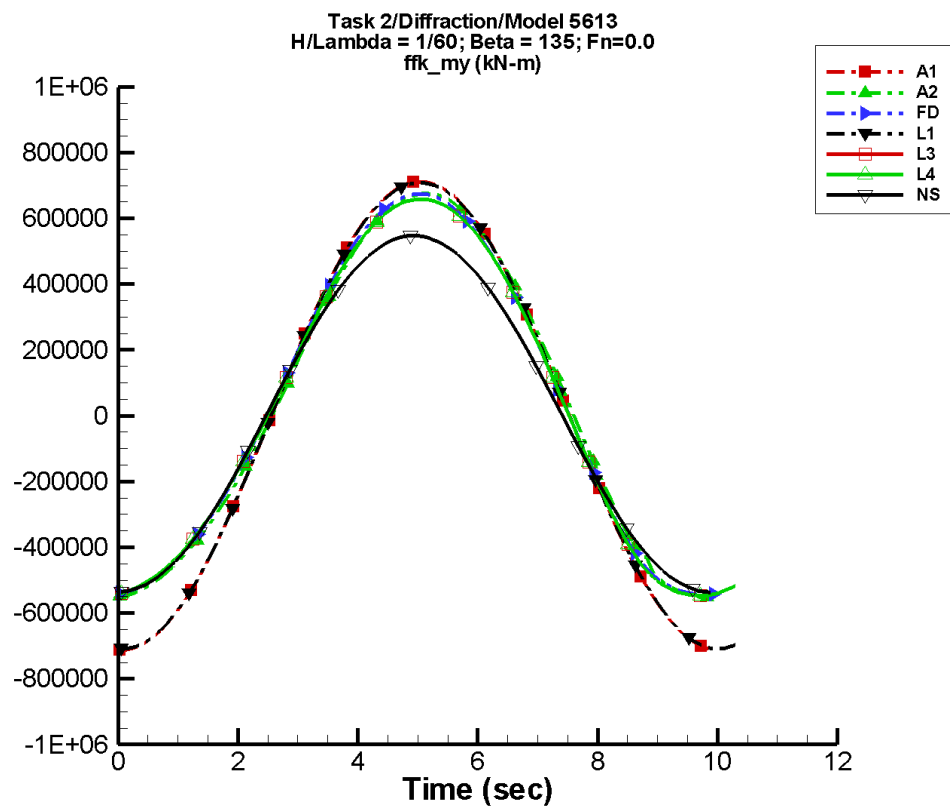
Table G–1579. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.290	1.08E+03	160	3.04	-76
A2	0.290	1.08E+03	160	3.04	-76
FD	-4.05E-09	1.09E-05	158	4.94E-09	-173
L1	3.31	892.	174	183.	79
L3	3.33	893.	173	183.	79
L4	583.	698.	-24	302.	-109
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1580. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.10E+03	1.10E+03	-1.09E+03	1.09E+03
A2	-1.10E+03	1.10E+03	-1.09E+03	1.09E+03
FD	-1.09E-05	1.09E-05	-1.08E-05	1.08E-05
L1	-1.07E+03	712.	-1.07E+03	712.
L3	-1.07E+03	713.	-1.07E+03	712.
L4	-103.	1.68E+03	-7.09	1.62E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–791. Time history of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

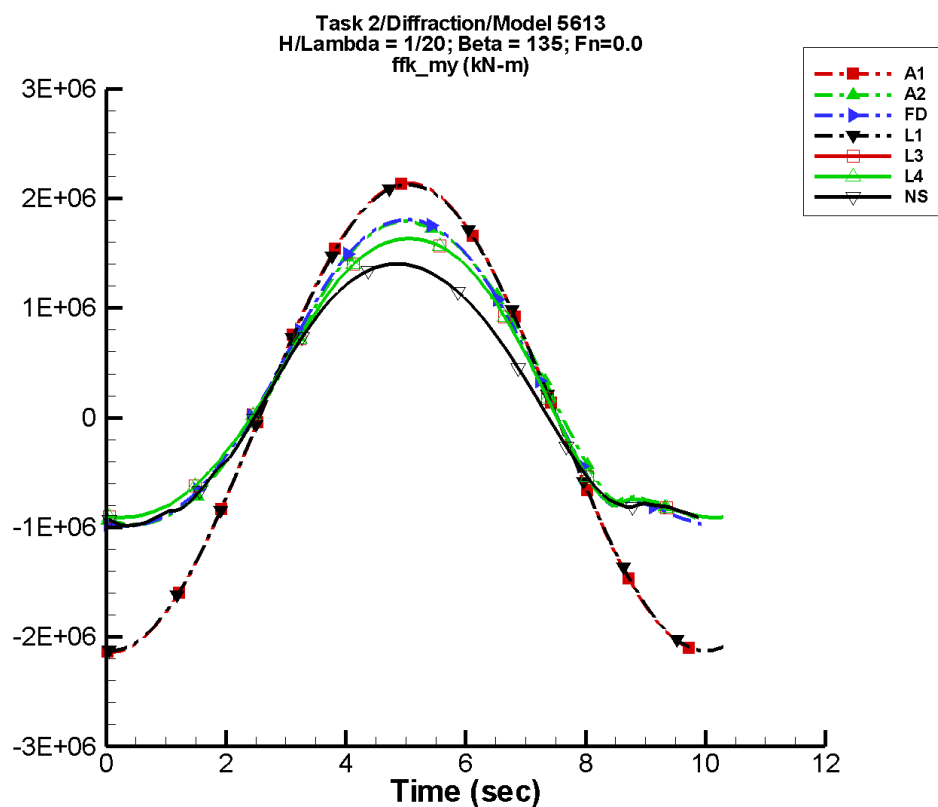Table G–1581. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.387	1.44E+03	160	4.07	-76
A2	0.387	1.44E+03	160	4.07	-76
FD	-5.40E-09	1.45E-05	158	6.59E-09	-173
L1	38.1	1.19E+03	174	326.	79
L3	38.1	1.19E+03	173	326.	79
L4	706.	871.	-19	162.	-110
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1582. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.47E+03	1.47E+03	-1.45E+03	1.45E+03
A2	-1.47E+03	1.47E+03	-1.45E+03	1.45E+03
FD	-1.45E-05	1.45E-05	-1.44E-05	1.44E-05
L1	-1.48E+03	909.	-1.47E+03	908.
L3	-1.48E+03	915.	-1.47E+03	914.
L4	-165.	2.01E+03	-145.	1.89E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–792. Time history of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
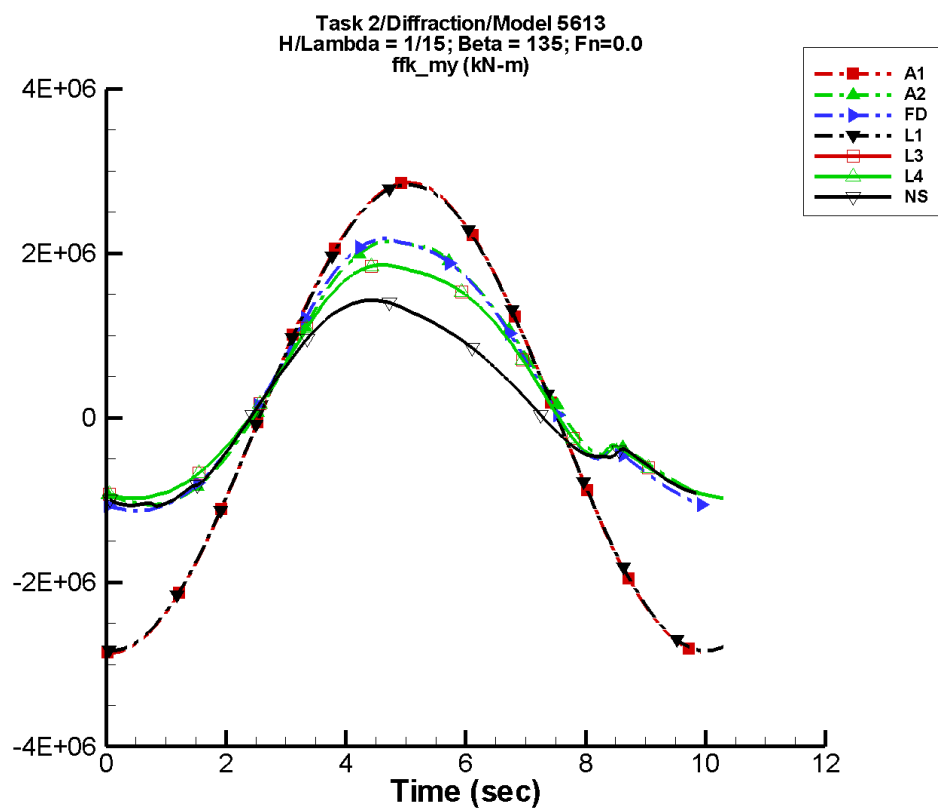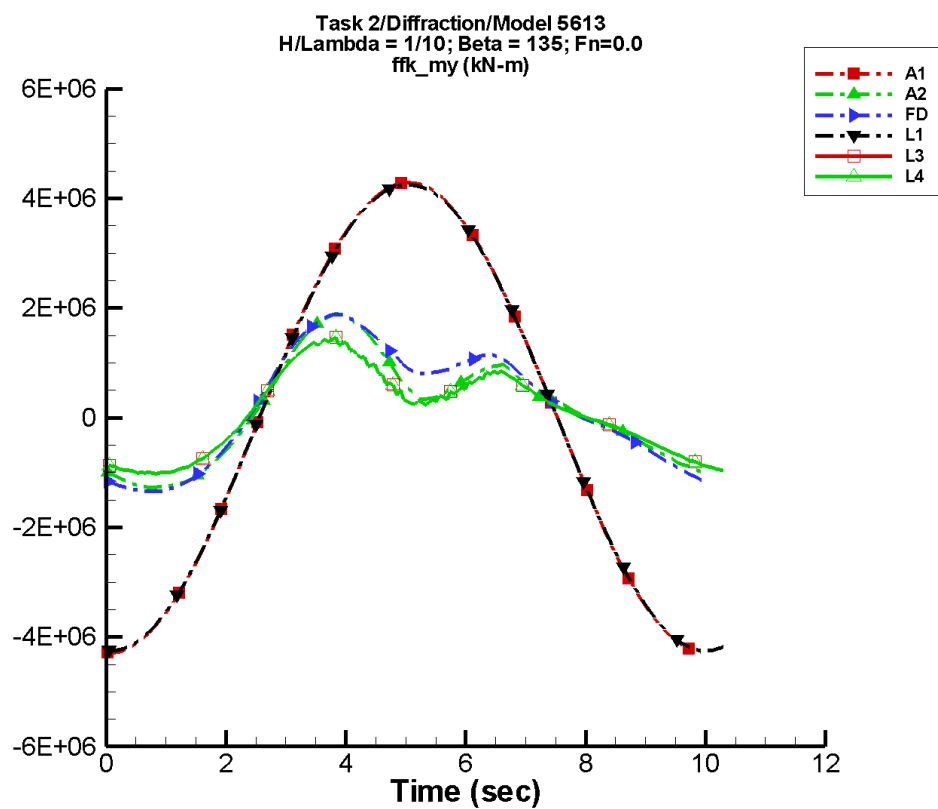
Table G–1583. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.580	2.15E+03	160	6.10	-76
A2	0.580	2.15E+03	160	6.10	-76
FD	-8.10E-09	2.18E-05	158	9.88E-09	-173
L1	137.	1.78E+03	174	732.	79
L3	137.	1.78E+03	173	732.	79
L4	1.00E+03	1.16E+03	-6	330.	-37
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1584. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.20E+03	2.21E+03	-2.17E+03	2.18E+03
A2	-2.20E+03	2.21E+03	-2.17E+03	2.18E+03
FD	-2.18E-05	2.18E-05	-2.16E-05	2.16E-05
L1	-2.38E+03	1.42E+03	-2.36E+03	1.41E+03
L3	-2.38E+03	1.43E+03	-2.36E+03	1.43E+03
L4	-4.36E+03	6.79E+03	-231.	3.27E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–793. Time history of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
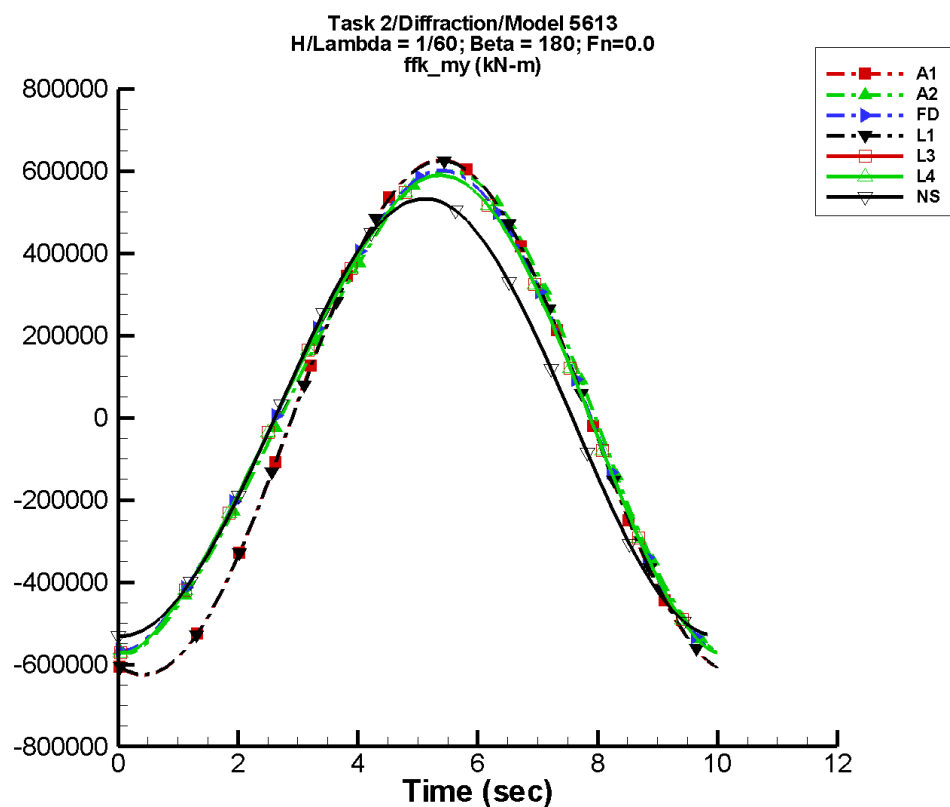
Table G–1585. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-0.664	565.	37	2.14	-88
A2	-0.664	565.	37	2.14	-88
FD	-1.70E-04	13.0	163	4.27E-04	-40
L1	-32.6	526.	49	15.6	-95
L3	-32.6	526.	48	15.7	-95
L4	195.	235.	-114	224.	-2
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1586. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-571.	567.	-553.	553.
A2	-571.	567.	-553.	553.
FD	-13.0	13.0	-12.7	12.7
L1	-563.	490.	-558.	486.
L3	-562.	491.	-558.	487.
L4	-174.	612.	-142.	605.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–794. Time history of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
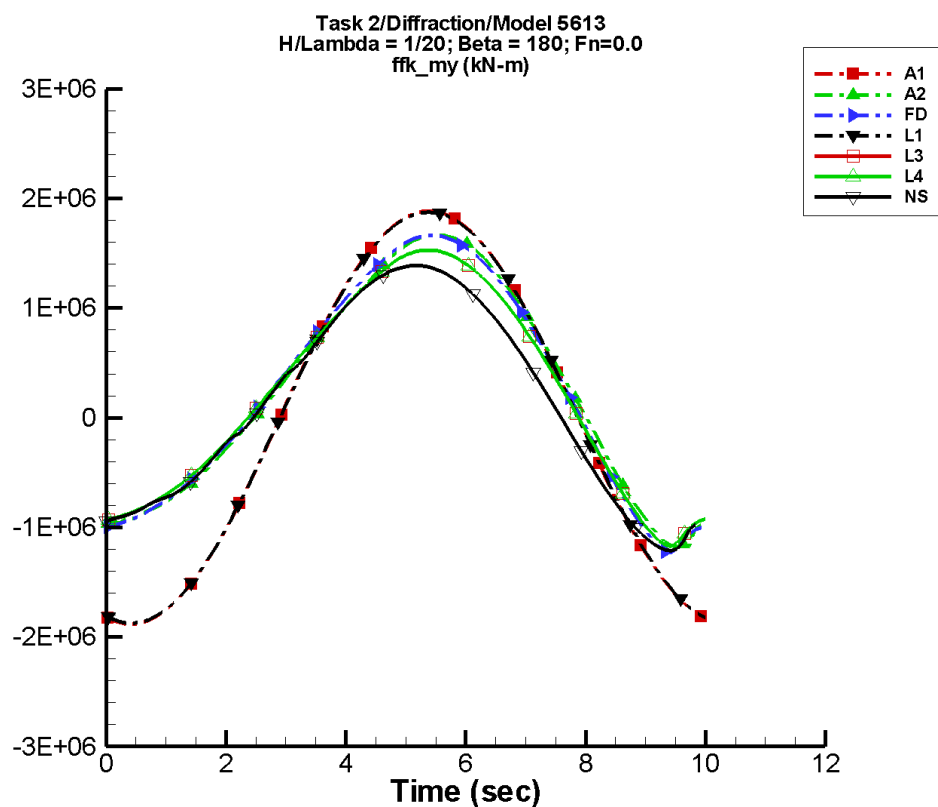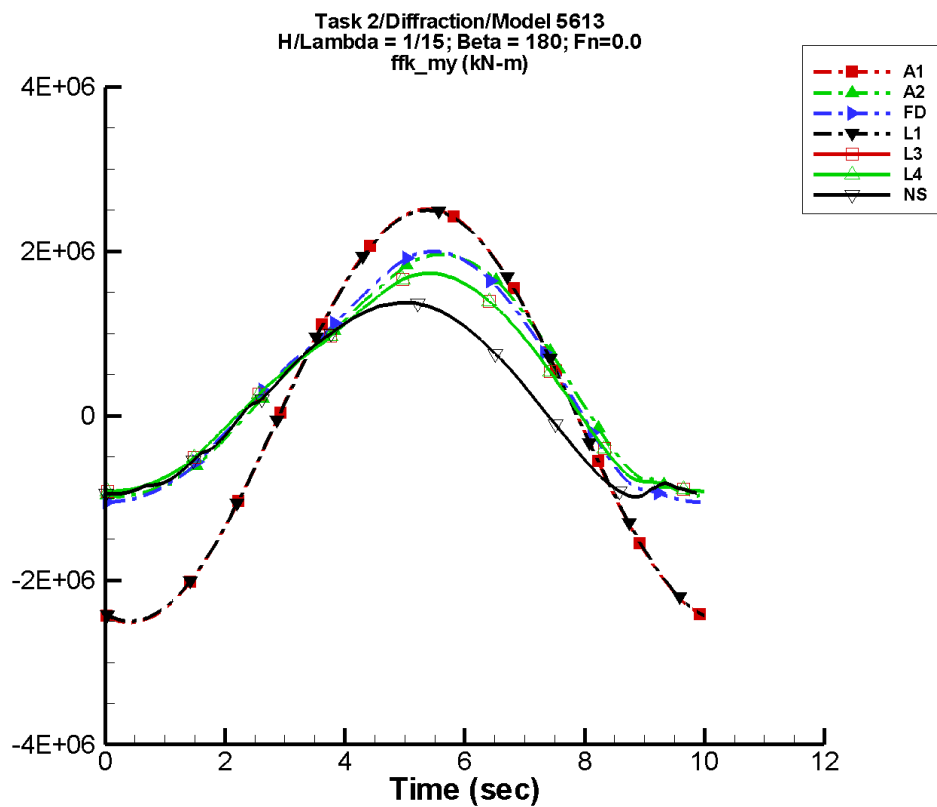
Table G–1587. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-2.00	1.70E+03	37	6.45	-88
A2	-2.00	1.70E+03	37	6.45	-88
FD	-5.10E-04	39.0	163	1.28E-03	-40
L1	39.9	1.58E+03	49	140.	-95
L3	39.9	1.58E+03	48	140.	-95
L4	588.	590.	-103	662.	-16
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1588. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.72E+03	1.71E+03	-1.66E+03	1.66E+03
A2	-1.72E+03	1.71E+03	-1.66E+03	1.66E+03
FD	-38.9	38.9	-38.0	38.0
L1	-1.59E+03	1.61E+03	-1.58E+03	1.59E+03
L3	-1.58E+03	1.62E+03	-1.57E+03	1.60E+03
L4	-733.	1.89E+03	-610.	1.69E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.3
fdif_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–795. Time history of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
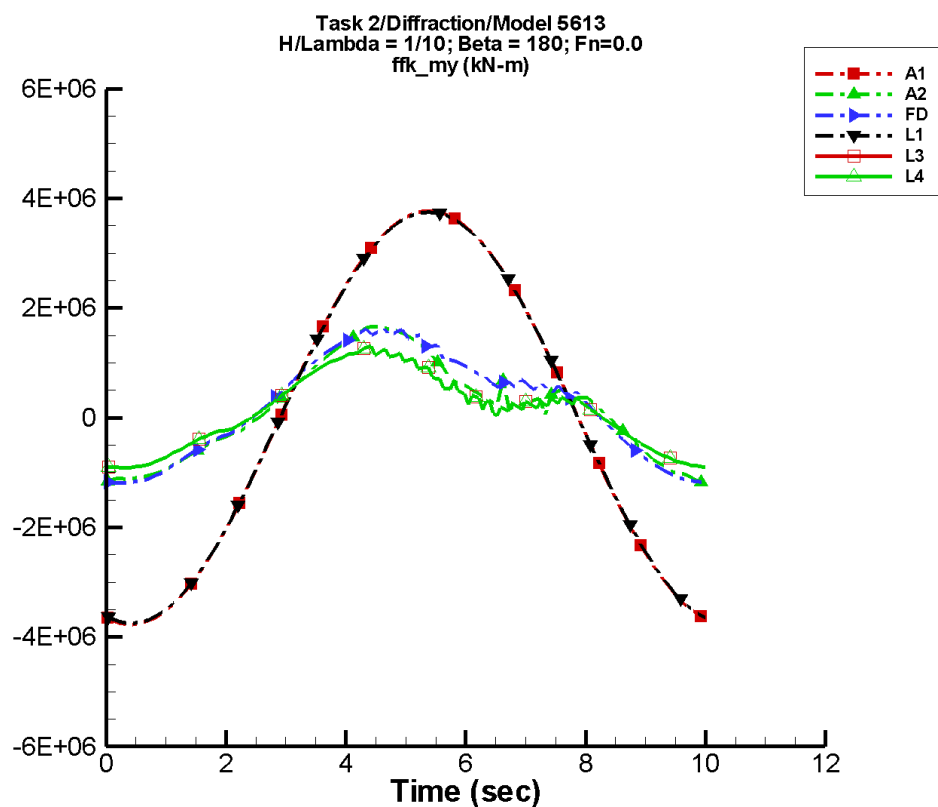
Table G–1589. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-2.67	2.27E+03	37	8.61	-88
A2	-2.67	2.27E+03	37	8.61	-88
FD	-6.79E-04	51.9	163	1.71E-03	-40
L1	103.	2.10E+03	49	250.	-95
L3	103.	2.10E+03	48	250.	-95
L4	739.	611.	-95	921.	-24
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1590. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.29E+03	2.28E+03	-2.22E+03	2.22E+03
A2	-2.29E+03	2.28E+03	-2.22E+03	2.22E+03
FD	-51.9	51.9	-50.7	50.7
L1	-2.11E+03	2.21E+03	-2.08E+03	2.19E+03
L3	-2.10E+03	2.22E+03	-2.07E+03	2.20E+03
L4	-1.11E+03	2.00E+03	-949.	1.98E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–796. Time history of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
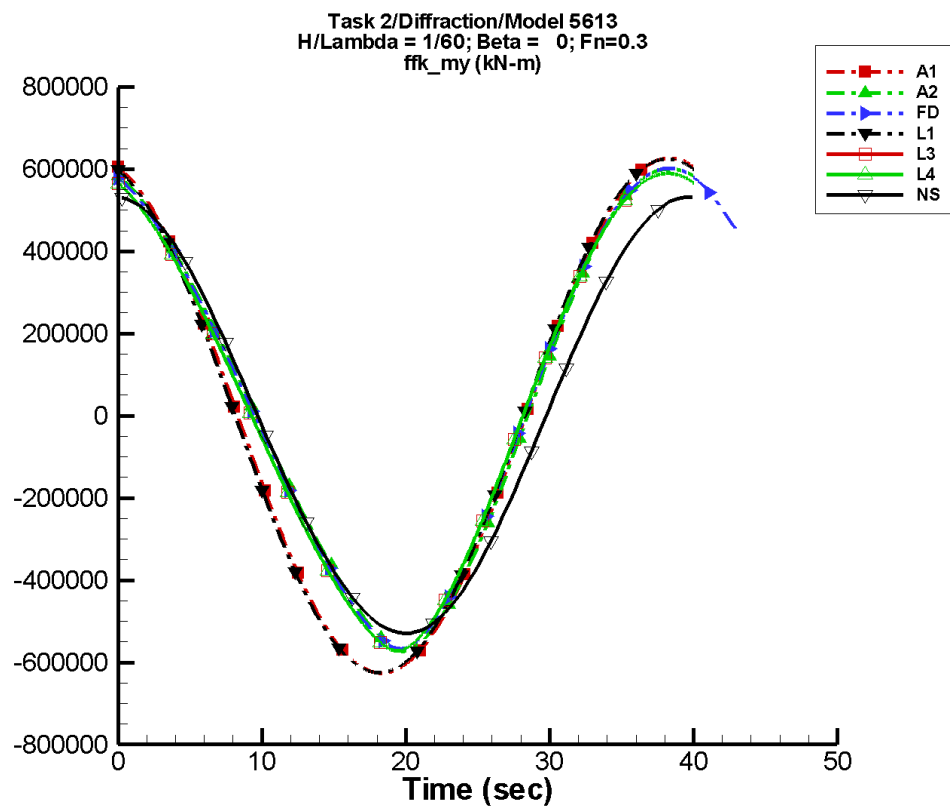
Table G–1591. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-4.00	3.40E+03	37	12.9	-88
A2	-4.00	3.40E+03	37	12.9	-88
FD	-1.02E-03	77.9	163	2.56E-03	-40
L1	285.	3.16E+03	49	561.	-95
L3	285.	3.16E+03	48	561.	-95
L4	1.10E+03	530.	-51	1.14E+03	-26
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1592. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-3.44E+03	3.42E+03	-3.33E+03	3.33E+03
A2	-3.44E+03	3.42E+03	-3.33E+03	3.33E+03
FD	-77.9	77.8	-76.1	76.0
L1	-3.15E+03	3.50E+03	-3.11E+03	3.46E+03
L3	-3.13E+03	3.53E+03	-3.09E+03	3.49E+03
L4	-3.00E+03	7.57E+03	-1.02E+03	3.57E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 180; Fn=0.3
fdif_x (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–797. Time history of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
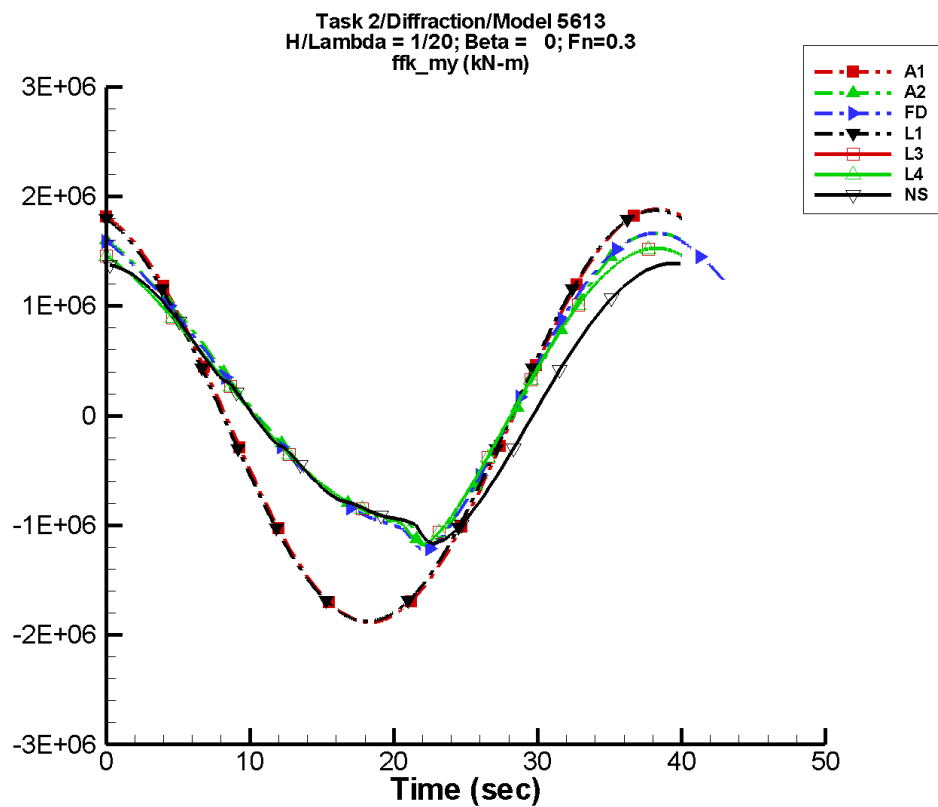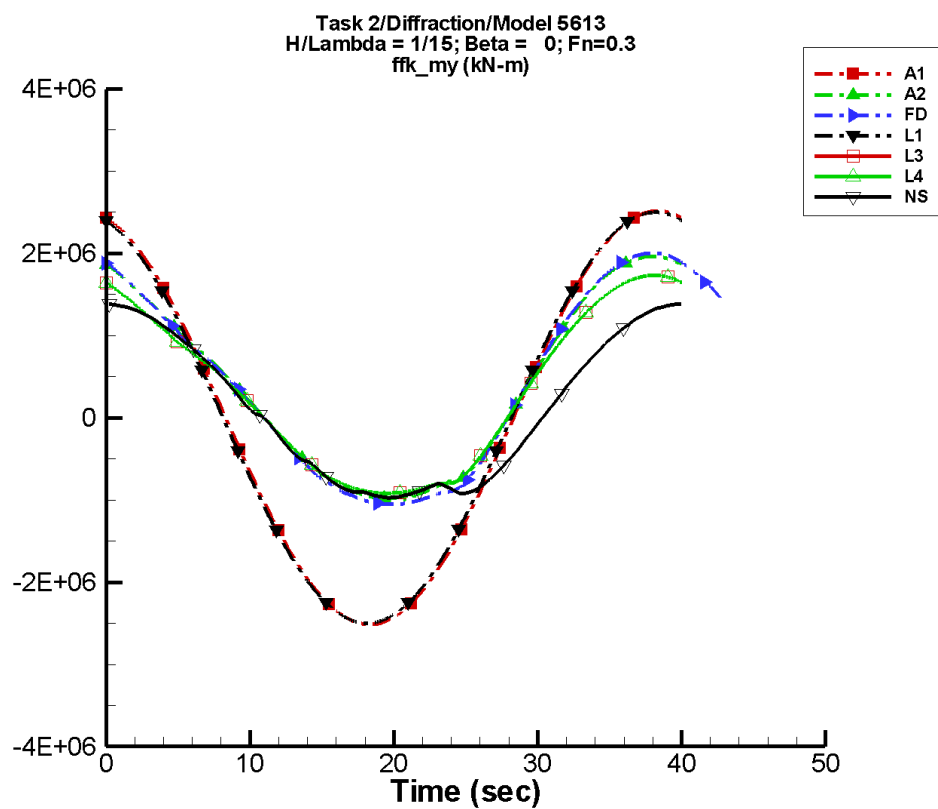
Table G–1593. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-3.34	529.	19	0.344	-61
A2	-3.34	529.	19	0.344	-61
FD	3.23E-03	37.7	-52	6.51E-02	-99
L1	-26.6	594.	26	2.80	-87
L3	-26.5	594.	25	2.82	-87
L4	153.	377.	85	181.	-139
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1594. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-531.	543.	-515.	512.
A2	-531.	543.	-515.	512.
FD	-37.7	37.6	-36.5	36.4
L1	-618.	568.	-612.	562.
L3	-618.	569.	-612.	562.
L4	-608.	712.	-488.	568.
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–798.   Time history of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
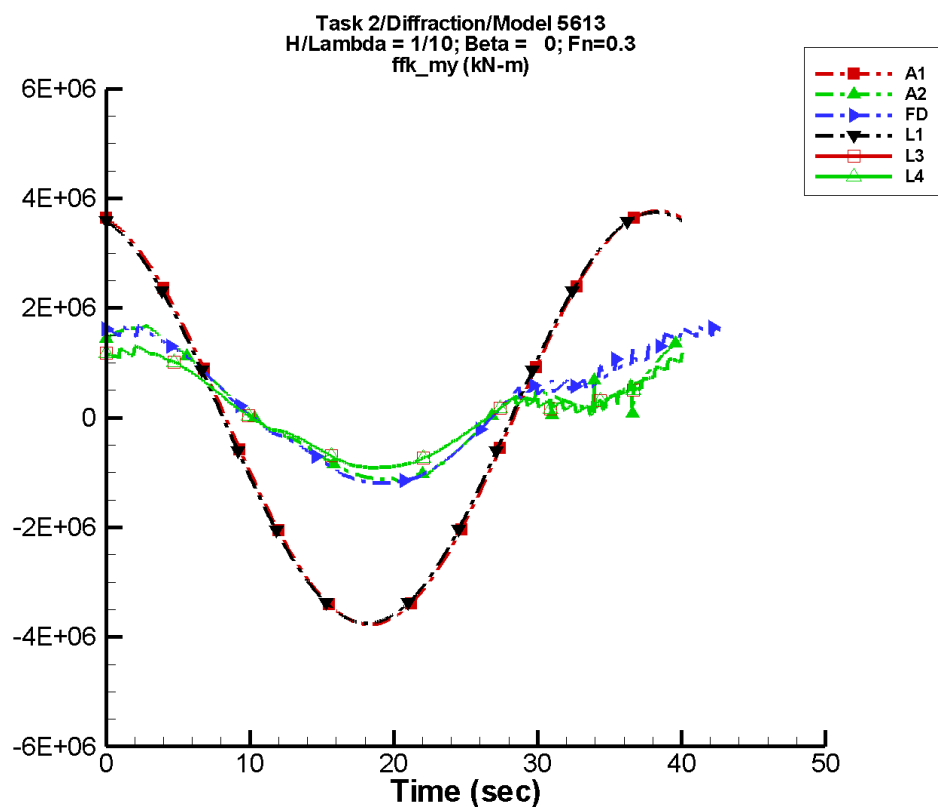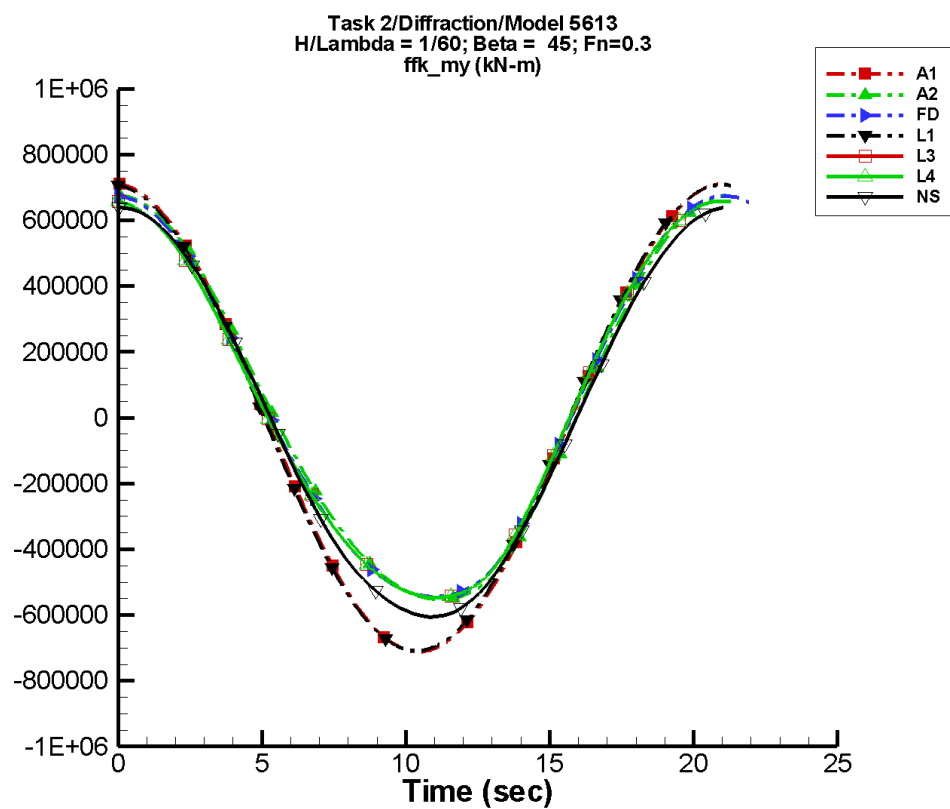
Table G–1595. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-10.0	1.59E+03	19	1.04	-61
A2	-10.0	1.59E+03	19	1.04	-61
FD	9.71E-03	113.	-52	0.195	-99
L1	95.6	1.78E+03	26	28.9	-102
L3	95.7	1.78E+03	25	29.0	-101
L4	363.	1.07E+03	80	737.	-151
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1596. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.60E+03	1.63E+03	-1.55E+03	1.54E+03
A2	-1.60E+03	1.63E+03	-1.55E+03	1.54E+03
FD	-113.	113.	-109.	109.
L1	-1.67E+03	1.89E+03	-1.65E+03	1.87E+03
L3	-1.67E+03	1.89E+03	-1.65E+03	1.87E+03
L4	-2.71E+03	2.03E+03	-1.76E+03	1.61E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–799. Time history of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1597. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-13.4	2.12E+03	19	1.38	-61
A2	-13.4	2.12E+03	19	1.38	-61
FD	1.29E-02	151.	-52	0.260	-99
L1	203.	2.37E+03	26	52.5	-103
L3	203.	2.38E+03	25	52.5	-103
L4	498.	1.54E+03	80	1.06E+03	-156
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1598. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.13E+03	2.18E+03	-2.07E+03	2.05E+03
A2	-2.13E+03	2.18E+03	-2.07E+03	2.05E+03
FD	-151.	151.	-146.	146.
L1	-2.15E+03	2.60E+03	-2.13E+03	2.57E+03
L3	-2.15E+03	2.60E+03	-2.12E+03	2.57E+03
L4	-3.38E+03	2.88E+03	-2.38E+03	2.48E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–800. Time history of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
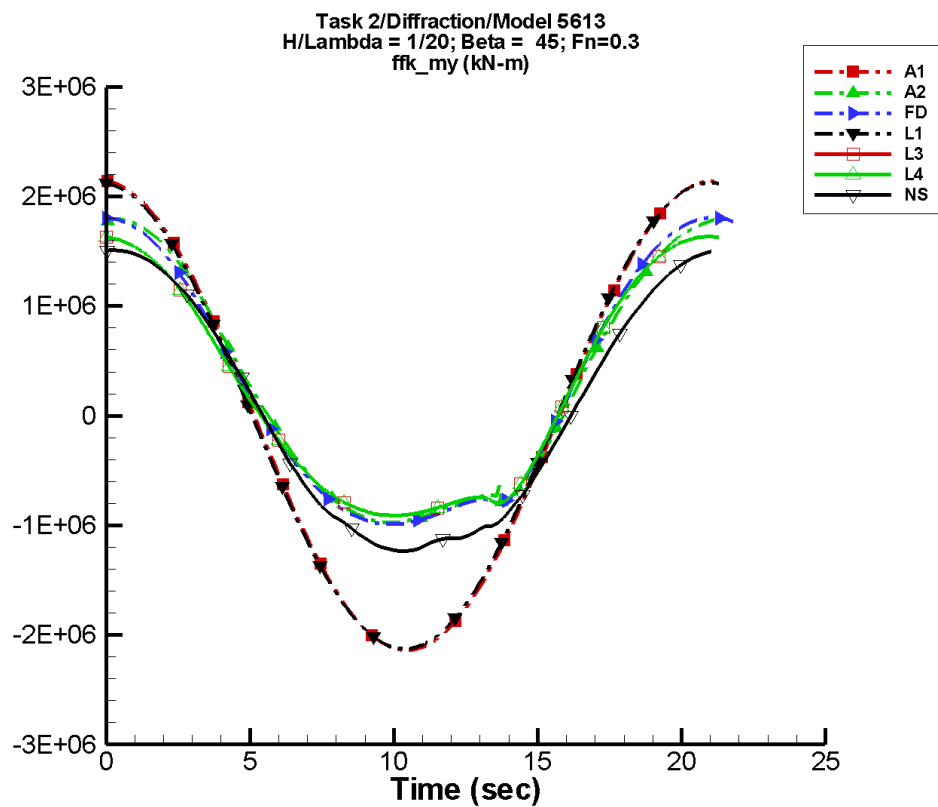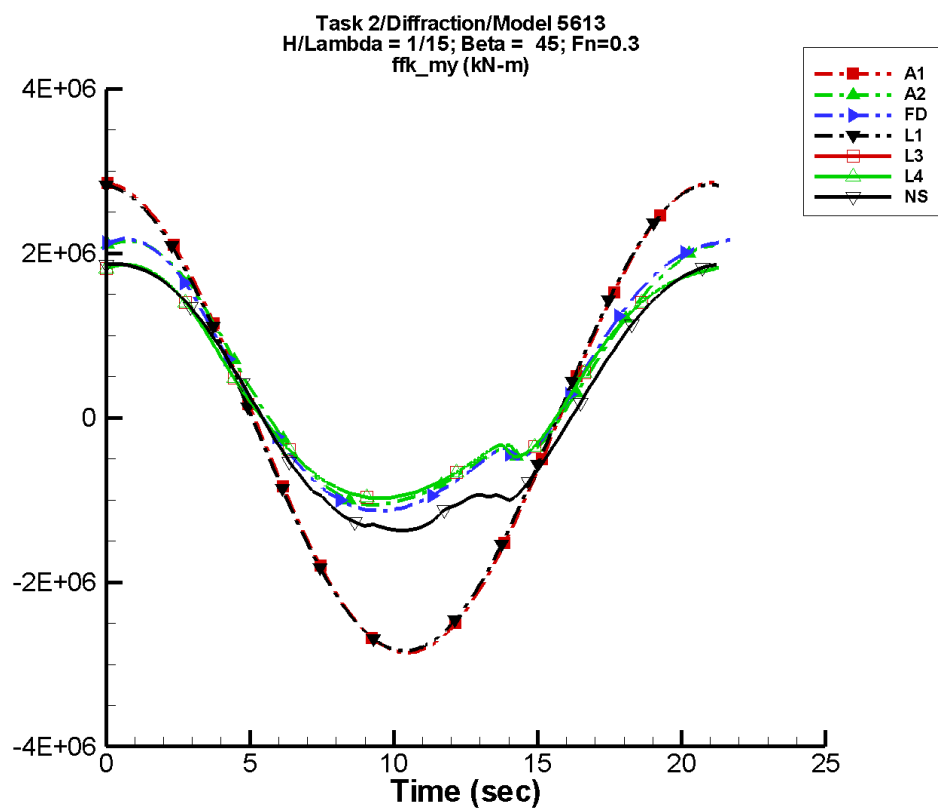
Table G–1599. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-20.1	3.19E+03	19	2.07	-61
A2	-20.1	3.19E+03	19	2.07	-61
FD	1.94E-02	226.	-52	0.390	-99
L1	509.	3.56E+03	26	120.	-105
L3	510.	3.56E+03	25	121.	-104
L4	941.	2.62E+03	85	1.53E+03	-149
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1600. Minimum and maximum of of F_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-3.20E+03	3.27E+03	-3.10E+03	3.08E+03
A2	-3.20E+03	3.27E+03	-3.10E+03	3.08E+03
FD	-226.	226.	-219.	219.
L1	-3.01E+03	4.12E+03	-2.97E+03	4.08E+03
L3	-3.01E+03	4.13E+03	-2.97E+03	4.09E+03
L4	-5.60E+03	1.05E+04	-3.95E+03	4.69E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–801. Time history of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
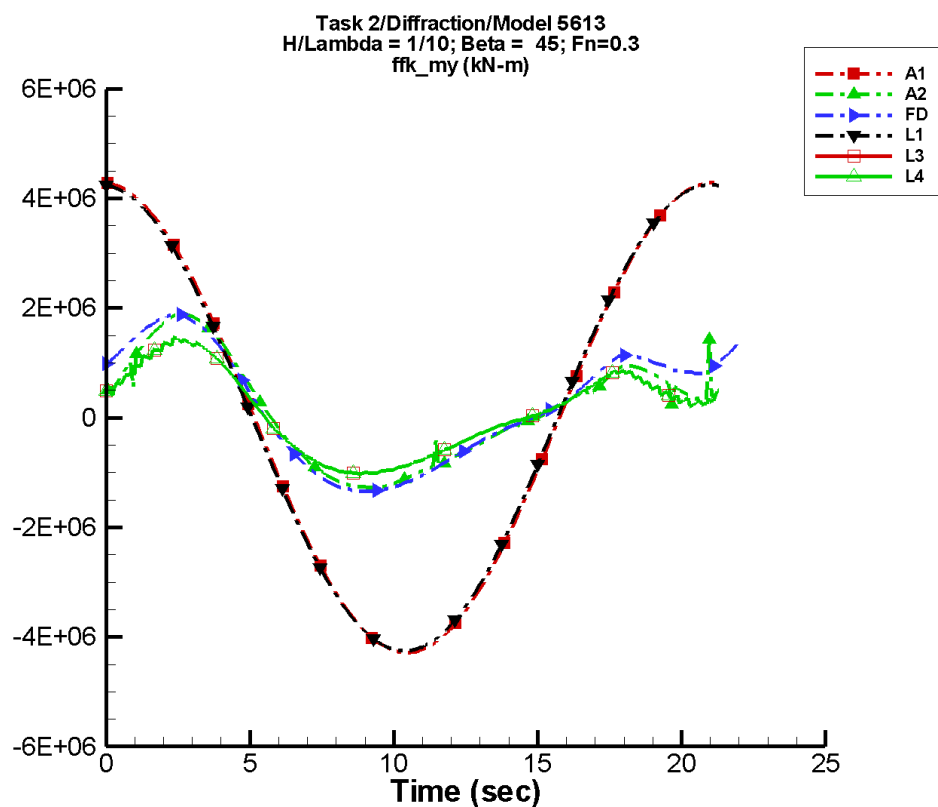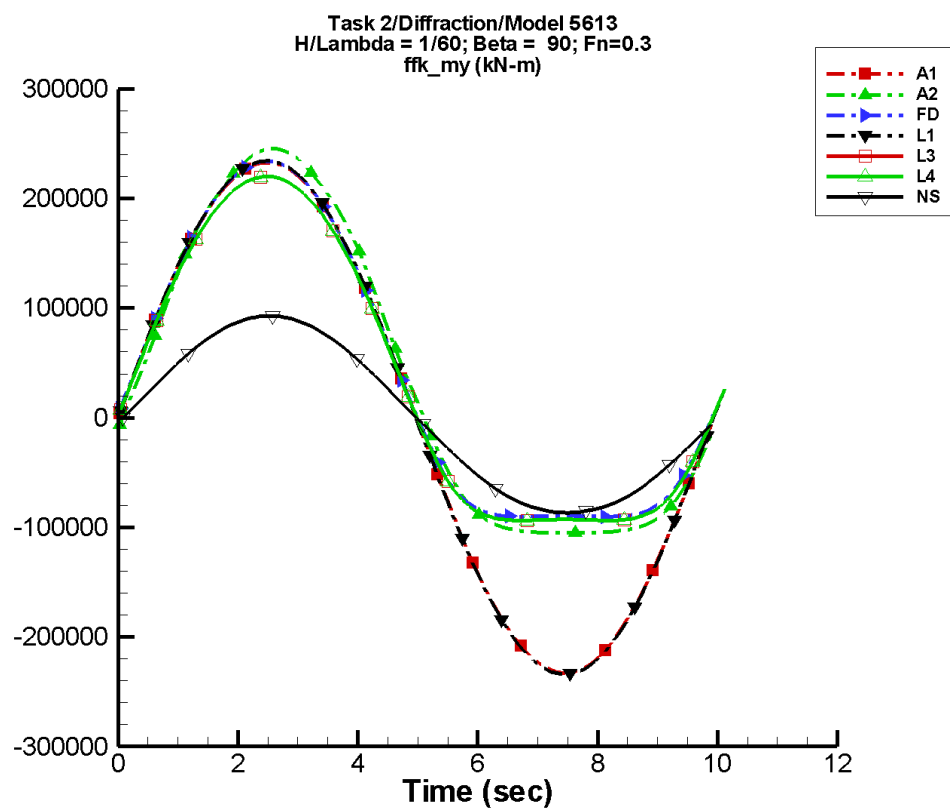
Table G–1601. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	2.54E-04	6.05E-02	158	3.04E-04	29
A2	2.54E-04	6.05E-02	158	3.04E-04	29
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.28E-05	2.11E-04	102	6.71E-04	-69

Table G–1602. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-6.34E-02	6.33E-02	-6.27E-02	6.25E-02
A2	-6.34E-02	6.33E-02	-6.27E-02	6.25E-02
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-3.15E-03	2.91E-03	-2.01E-03	1.61E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.0
fdif_y (kN)

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–802. Time history of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1603. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	7.63E-04	0.182	158	9.14E-04	29
A2	7.63E-04	0.182	158	9.14E-04	29
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-3.50E-04	5.57E-04	-131	1.52E-03	-109

Table G–1604. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
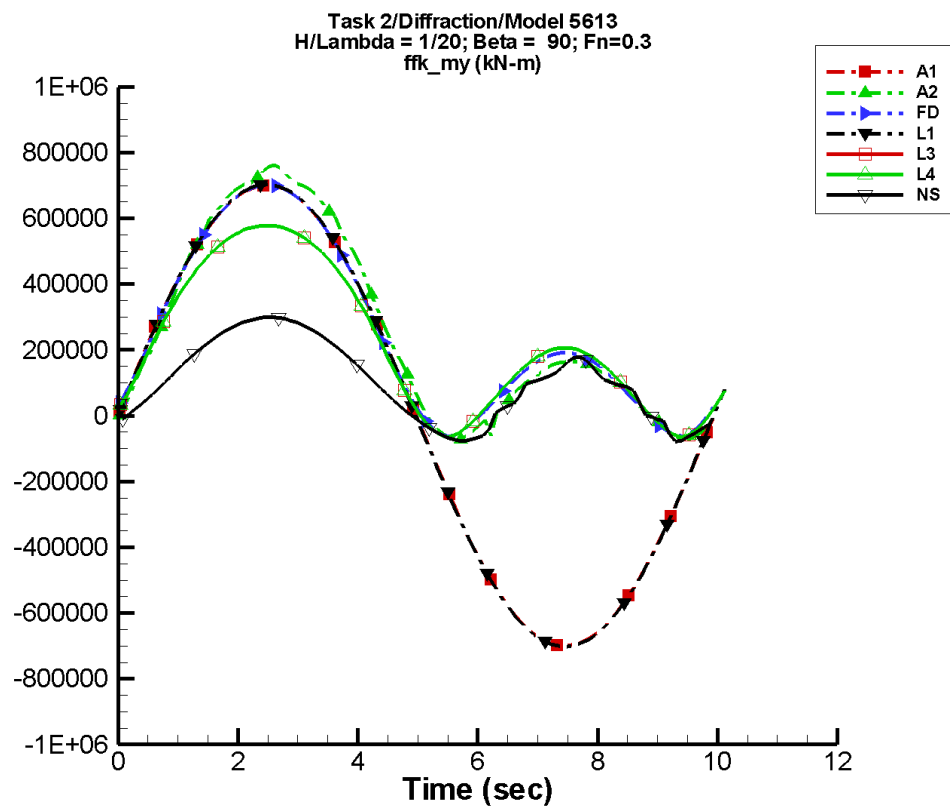
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-0.191	0.190	-0.189	0.188
A2	-0.191	0.190	-0.189	0.188
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.45E-02	9.44E-03	-9.53E-03	4.29E-03

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–803. Time history of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
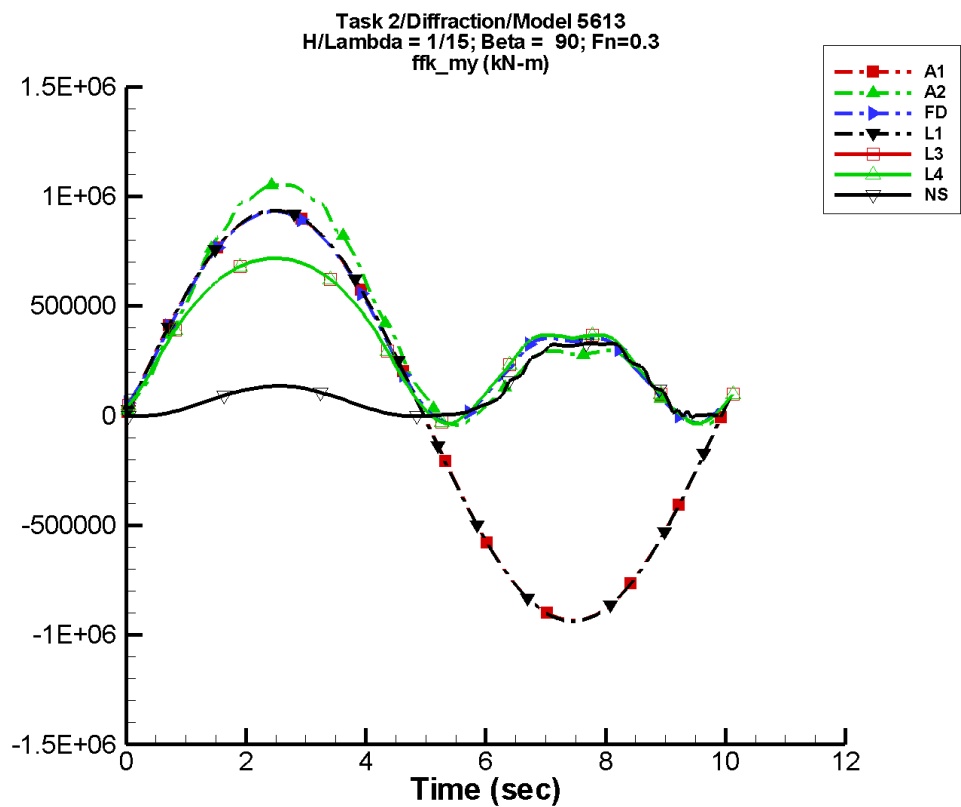
Table G–1605. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.02E-03	0.243	158	1.22E-03	29
A2	1.02E-03	0.243	158	1.22E-03	29
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.84E-04	5.15E-04	87	1.53E-03	111

Table G–1606. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-0.255	0.254	-0.252	0.251
A2	-0.255	0.254	-0.252	0.251
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-2.00E-02	1.92E-02	-3.28E-03	2.65E-03

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–804. Time history of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
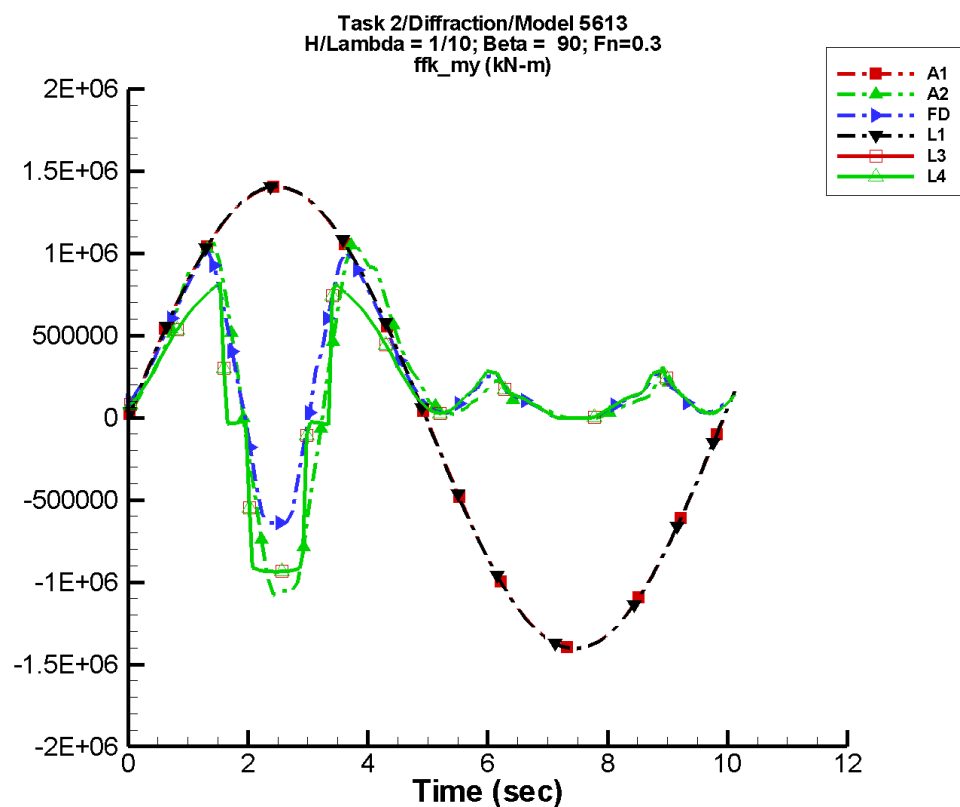
Table G–1607. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.53E-03	0.364	158	1.83E-03	29
A2	1.53E-03	0.364	158	1.83E-03	29
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1608. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-0.382	0.381	-0.378	0.376
A2	-0.382	0.381	-0.378	0.376
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–805. Time history of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
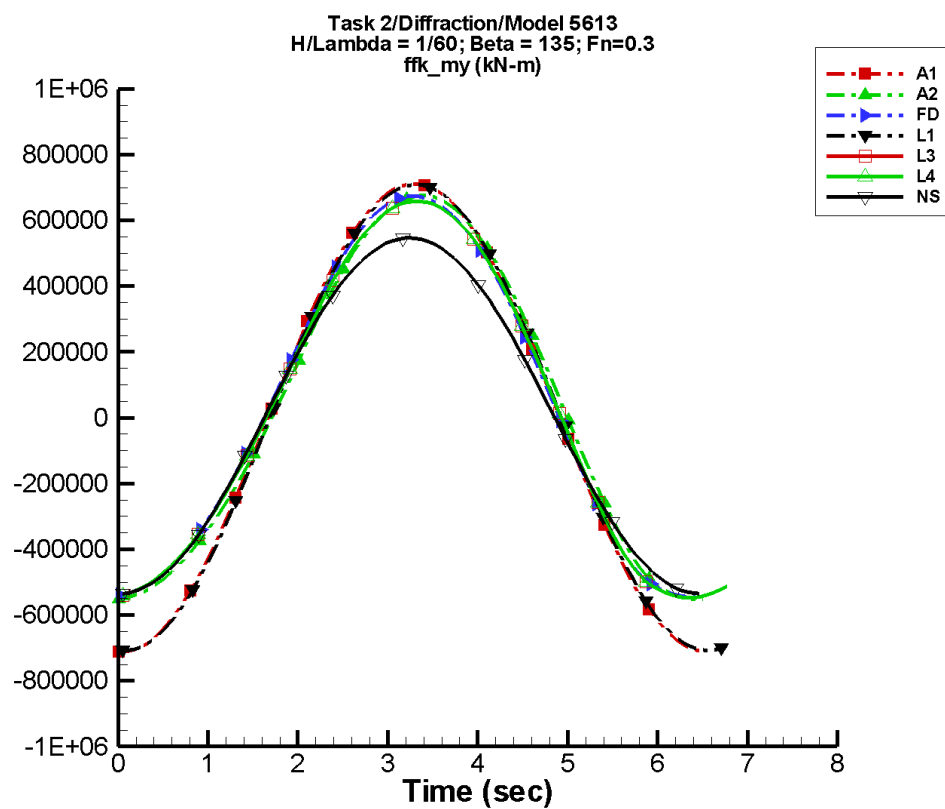
Table G–1609. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.89	1.05E+03	40	1.22	-89
A2	-1.89	1.05E+03	40	1.22	-89
FD	1.15E-02	1.24E+03	31	0.514	63
L1	-200.	1.11E+03	50	111.	72
L3	-200.	1.11E+03	49	111.	72
L4	78.9	1.06E+03	49	252.	63
NF	—	—	—	—	—
NS	138.	761.	50	83.1	127

Table G–1610. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
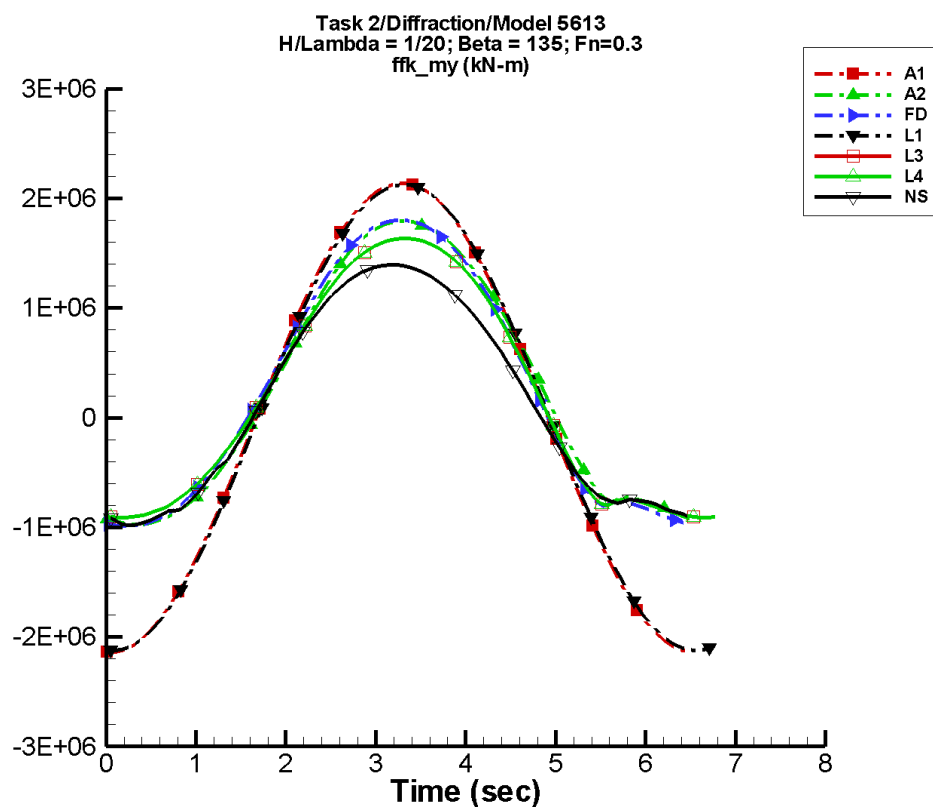
Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.05E+03	1.05E+03	-1.04E+03	1.04E+03
A2	-1.05E+03	1.05E+03	-1.04E+03	1.04E+03
FD	-1.24E+03	1.24E+03	-1.23E+03	1.23E+03
L1	-1.28E+03	975.	-1.27E+03	970.
L3	-1.28E+03	972.	-1.28E+03	967.
L4	-1.05E+03	1.50E+03	-966.	1.38E+03
NF	—	—	—	—
NS	-657.	888.	-649.	859.

Data identically zero, insufficient, or not available from NFA.

Figure G–806. Time history of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
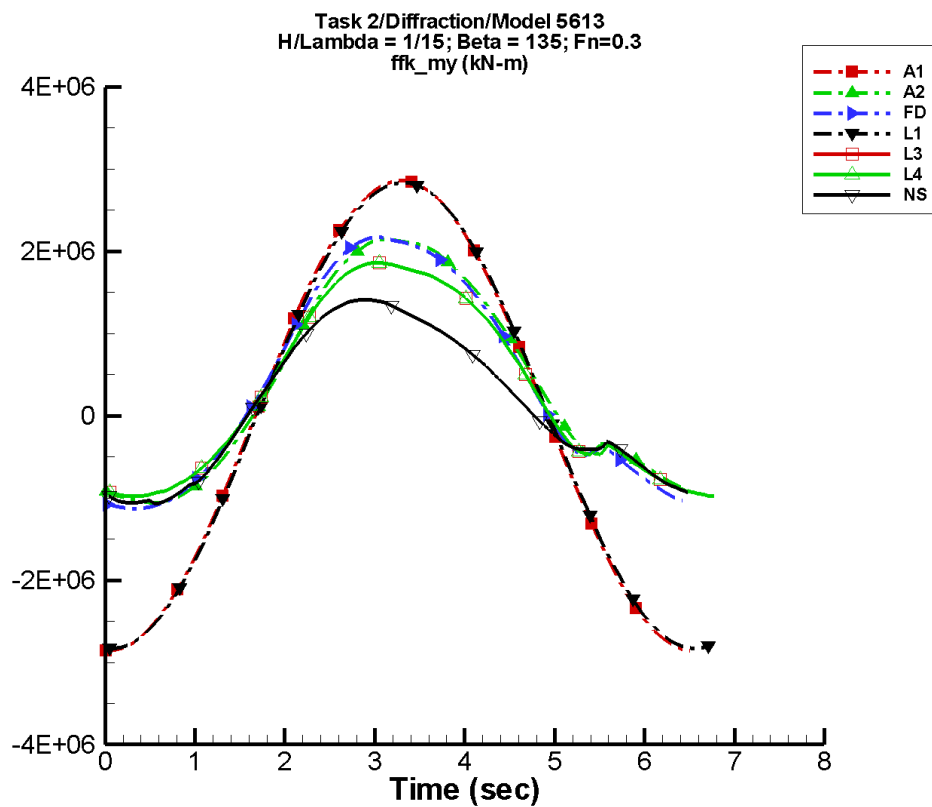
Table G–1611. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-5.67	3.17E+03	40	3.66	-89
A2	-5.67	3.17E+03	40	3.66	-89
FD	3.41E-02	3.72E+03	31	1.54	63
L1	-1.80E+03	3.32E+03	50	1.00E+03	72
L3	-1.80E+03	3.32E+03	49	1.00E+03	72
L4	819.	3.40E+03	54	1.97E+03	58
NF	—	—	—	—	—
NS	1.16E+03	2.77E+03	47	911.	124

Table G–1612. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-3.15E+03	3.15E+03	-3.12E+03	3.12E+03
A2	-3.15E+03	3.15E+03	-3.12E+03	3.12E+03
FD	-3.71E+03	3.71E+03	-3.68E+03	3.68E+03
L1	-5.22E+03	2.26E+03	-5.24E+03	2.24E+03
L3	-5.25E+03	2.24E+03	-5.27E+03	2.22E+03
L4	-3.83E+03	6.33E+03	-3.13E+03	5.84E+03
NF	—	—	—	—
NS	-2.33E+03	4.86E+03	-2.18E+03	4.07E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–807. Time history of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
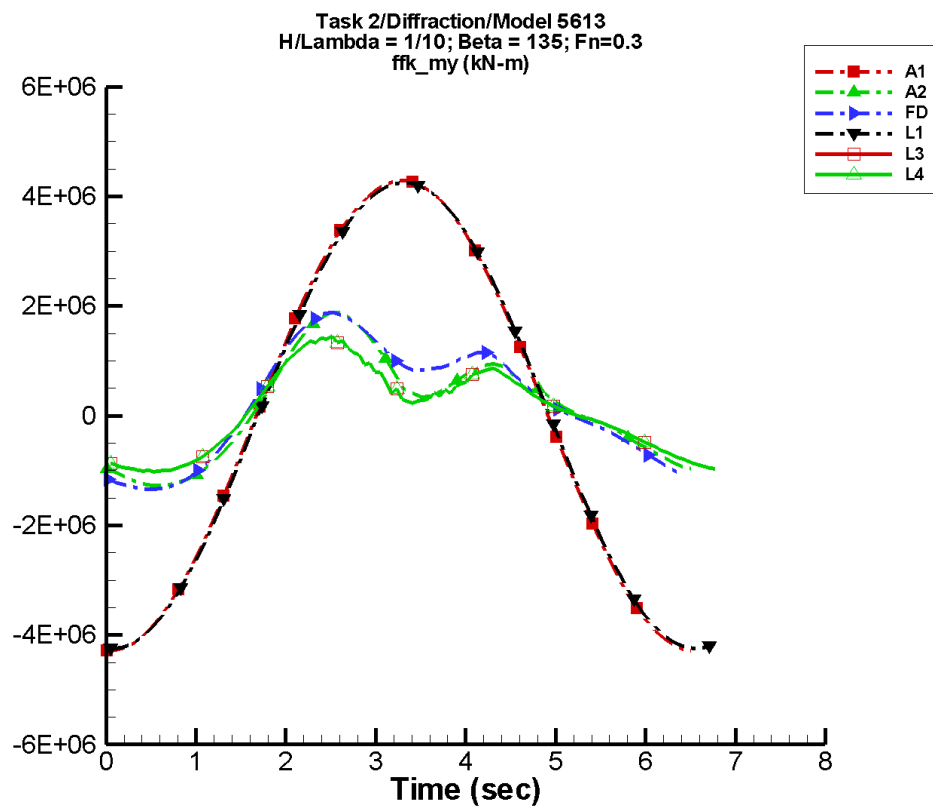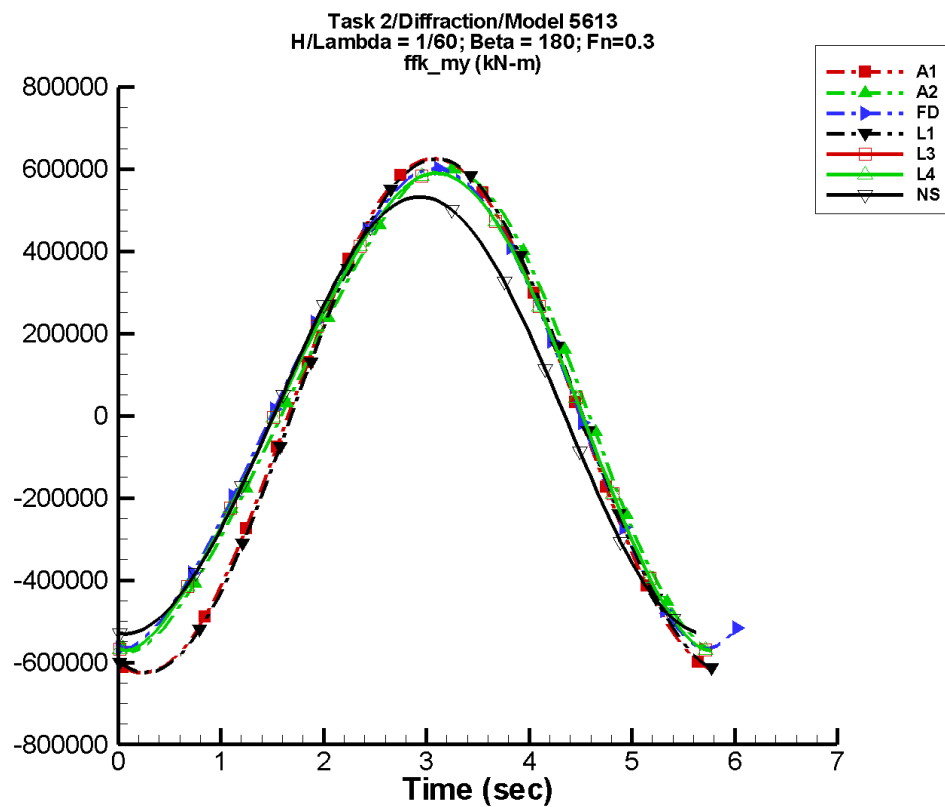
Table G–1613. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-7.57	4.23E+03	40	4.89	-89
A2	-7.57	4.23E+03	40	4.89	-89
FD	4.56E-02	4.95E+03	31	2.06	63
L1	-3.21E+03	4.43E+03	50	1.78E+03	72
L3	-3.21E+03	4.43E+03	49	1.78E+03	72
L4	1.73E+03	4.82E+03	61	3.01E+03	52
NF	—	—	—	—	—
NS	2.00E+03	4.76E+03	41	1.64E+03	111

Table G–1614. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-4.21E+03	4.20E+03	-4.17E+03	4.16E+03
A2	-4.21E+03	4.20E+03	-4.17E+03	4.16E+03
FD	-4.95E+03	4.95E+03	-4.90E+03	4.90E+03
L1	-8.03E+03	2.61E+03	-8.01E+03	2.57E+03
L3	-8.08E+03	2.58E+03	-8.05E+03	2.54E+03
L4	-4.24E+03	9.75E+03	-3.77E+03	8.92E+03
NF	—	—	—	—
NS	-4.54E+03	7.57E+03	-4.20E+03	7.36E+03

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–808. Time history of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1615. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-11.4	6.35E+03	40	7.33	-89
A2	-11.4	6.35E+03	40	7.33	-89
FD	6.84E-02	7.43E+03	31	3.08	63
L1	-7.22E+03	6.64E+03	50	4.00E+03	72
L3	-7.22E+03	6.64E+03	49	4.00E+03	72
L4	3.57E+03	1.02E+04	62	5.74E+03	34
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1616. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

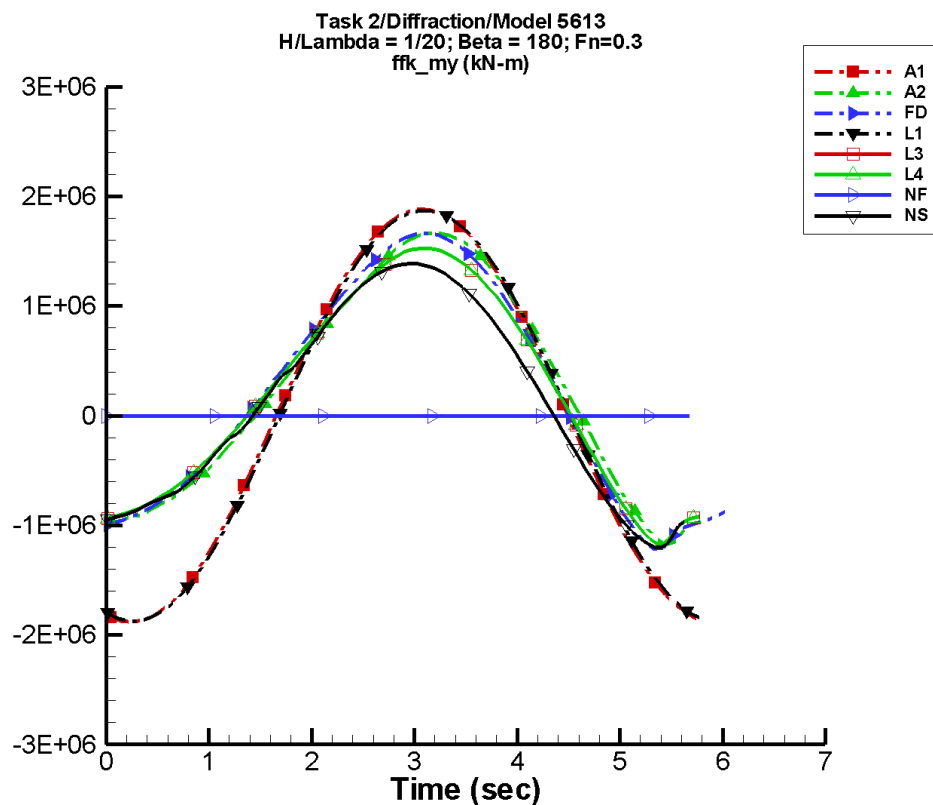| Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-6.31E+03	6.31E+03	-6.25E+03	6.25E+03
A2	-6.31E+03	6.31E+03	-6.25E+03	6.25E+03
FD	-7.43E+03	7.43E+03	-7.35E+03	7.35E+03
L1	-1.55E+04	2.75E+03	-1.54E+04	2.67E+03
L3	-1.56E+04	2.70E+03	-1.55E+04	2.62E+03
L4	-7.80E+03	2.02E+04	-5.45E+03	1.87E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.0
fdif_y (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–809. Time history of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
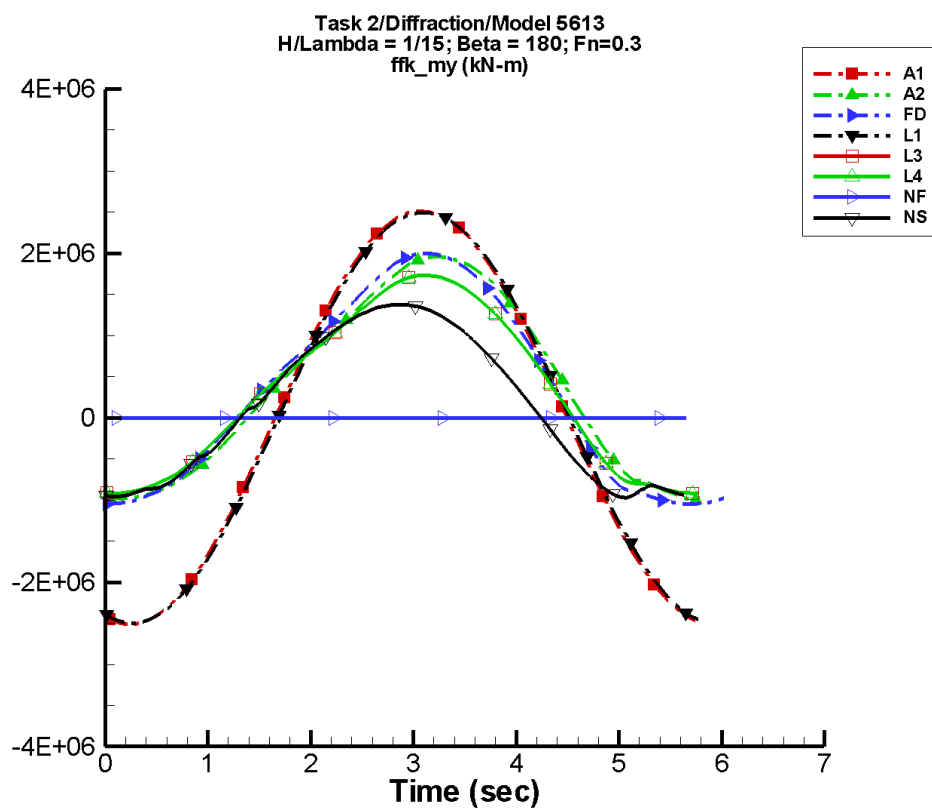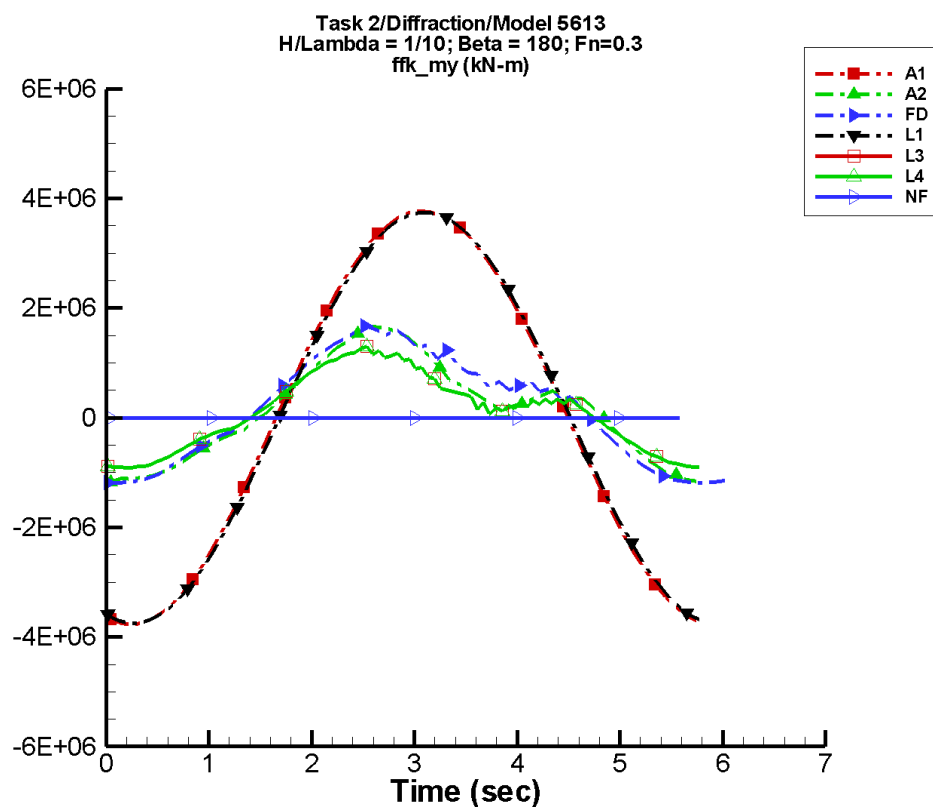
Table G–1617. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-2.43	2.75E+03	72	3.37	-44
A2	-2.43	2.75E+03	72	3.37	-44
FD	-0.926	3.50E+03	67	1.52	102
L1	-382.	2.93E+03	74	528.	25
L3	-382.	2.93E+03	73	528.	25
L4	252.	2.76E+03	72	930.	-4
NF	—	—	—	—	—
NS	209.	2.15E+03	78	367.	-38

Table G–1618. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.73E+03	2.76E+03	-2.70E+03	2.71E+03
A2	-2.73E+03	2.76E+03	-2.70E+03	2.71E+03
FD	-3.50E+03	3.50E+03	-3.46E+03	3.46E+03
L1	-2.98E+03	3.03E+03	-2.97E+03	3.01E+03
L3	-2.96E+03	3.04E+03	-2.95E+03	3.02E+03
L4	-2.82E+03	4.07E+03	-2.65E+03	3.77E+03
NF	—	—	—	—
NS	-2.06E+03	2.38E+03	-2.04E+03	2.33E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.0
fdif_y (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–810. Time history of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
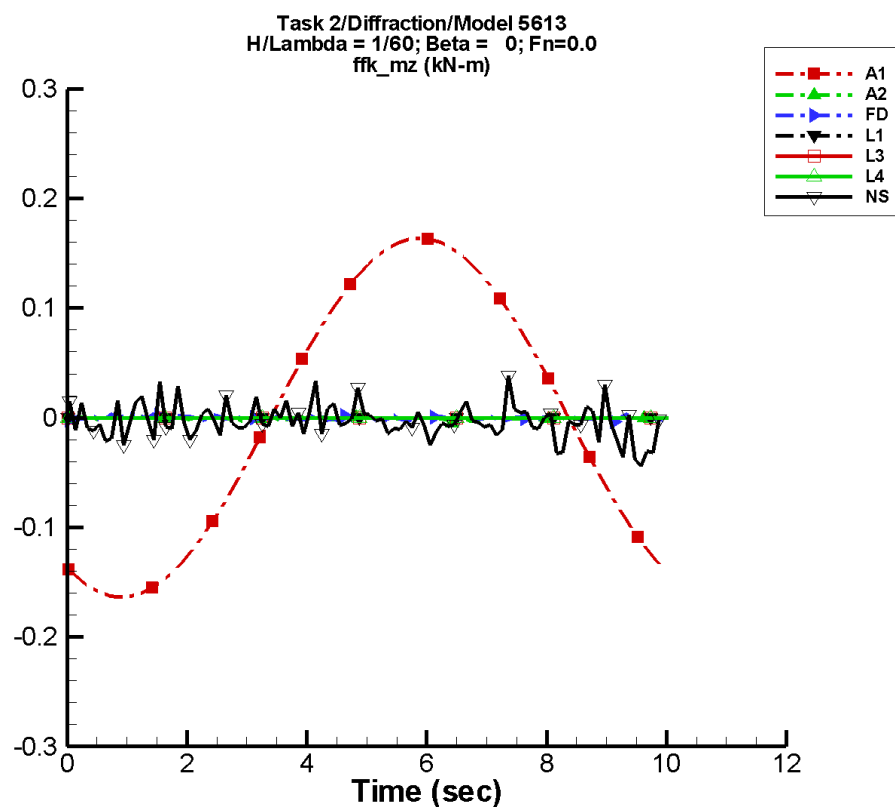
Table G–1619. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-7.32	8.27E+03	72	10.1	-44
A2	-7.32	8.27E+03	72	10.1	-44
FD	-2.78	1.05E+04	67	4.56	103
L1	-3.43E+03	8.80E+03	74	4.74E+03	25
L3	-3.43E+03	8.80E+03	73	4.74E+03	25
L4	1.80E+03	8.98E+03	75	7.55E+03	-7
NF	—	—	—	—	—
NS	1.74E+03	7.34E+03	69	3.76E+03	-41

Table G–1620. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-8.21E+03	8.29E+03	-8.12E+03	8.14E+03
A2	-8.21E+03	8.29E+03	-8.12E+03	8.14E+03
FD	-1.05E+04	1.05E+04	-1.04E+04	1.04E+04
L1	-1.23E+04	9.87E+03	-1.22E+04	9.78E+03
L3	-1.22E+04	9.91E+03	-1.21E+04	9.81E+03
L4	-1.43E+04	1.81E+04	-1.37E+04	1.67E+04
NF	—	—	—	—
NS	-9.10E+03	1.16E+04	-8.49E+03	1.09E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–811. Time history of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1621. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
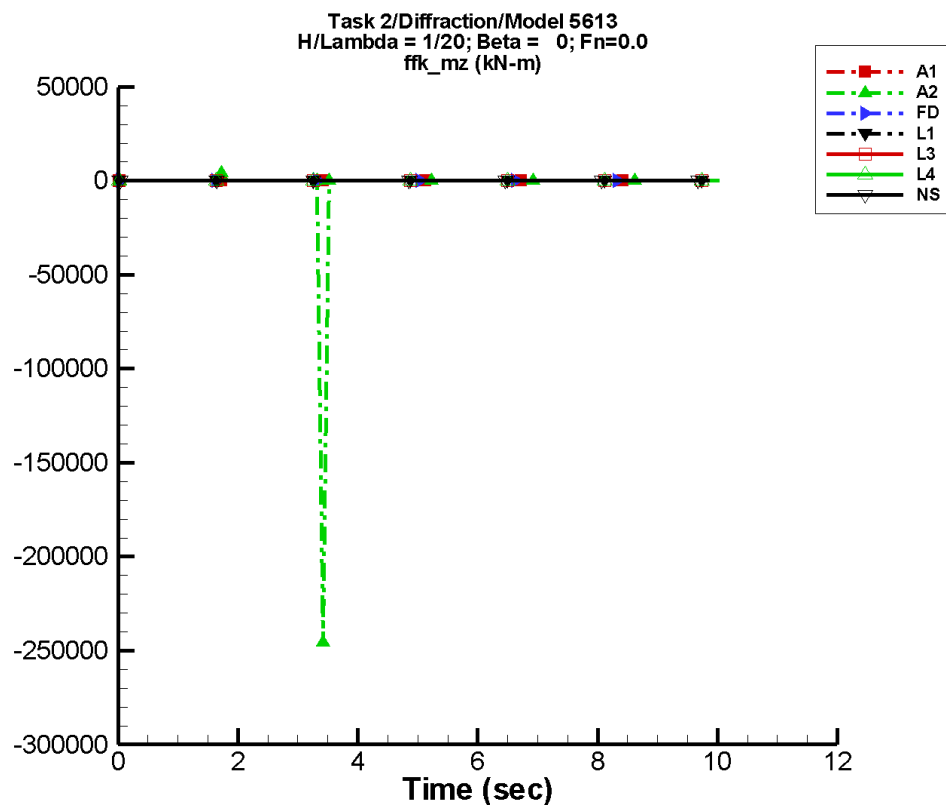
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-9.77	1.10E+04	72	13.5	-44
A2	-9.77	1.10E+04	72	13.5	-44
FD	-3.70	1.40E+04	67	6.08	103
L1	-6.10E+03	1.17E+04	74	8.43E+03	25
L3	-6.10E+03	1.17E+04	73	8.43E+03	25
L4	3.29E+03	1.34E+04	79	1.44E+04	-10
NF	—	—	—	—	—
NS	2.95E+03	1.05E+04	64	6.79E+03	-42

Table G–1622. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.10E+04	1.11E+04	-1.08E+04	1.09E+04
A2	-1.10E+04	1.11E+04	-1.08E+04	1.09E+04
FD	-1.40E+04	1.40E+04	-1.38E+04	1.38E+04
L1	-1.95E+04	1.37E+04	-1.94E+04	1.36E+04
L3	-1.93E+04	1.38E+04	-1.92E+04	1.36E+04
L4	-2.67E+04	2.88E+04	-2.61E+04	2.74E+04
NF	—	—	—	—
NS	-1.40E+04	1.99E+04	-1.34E+04	1.91E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–812. Time history of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
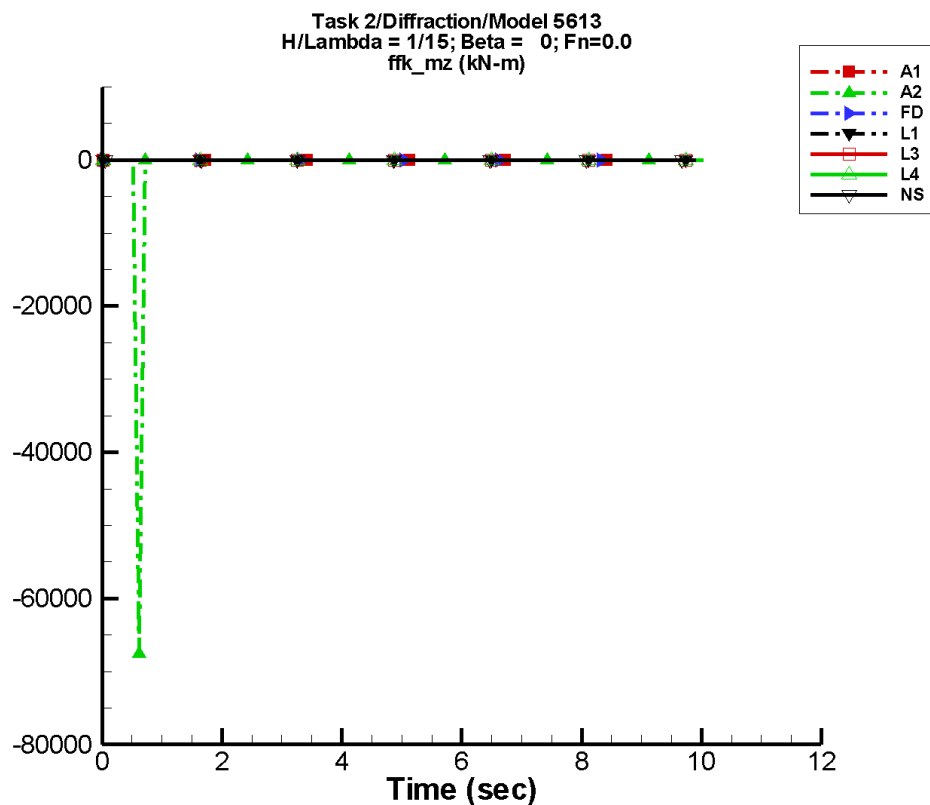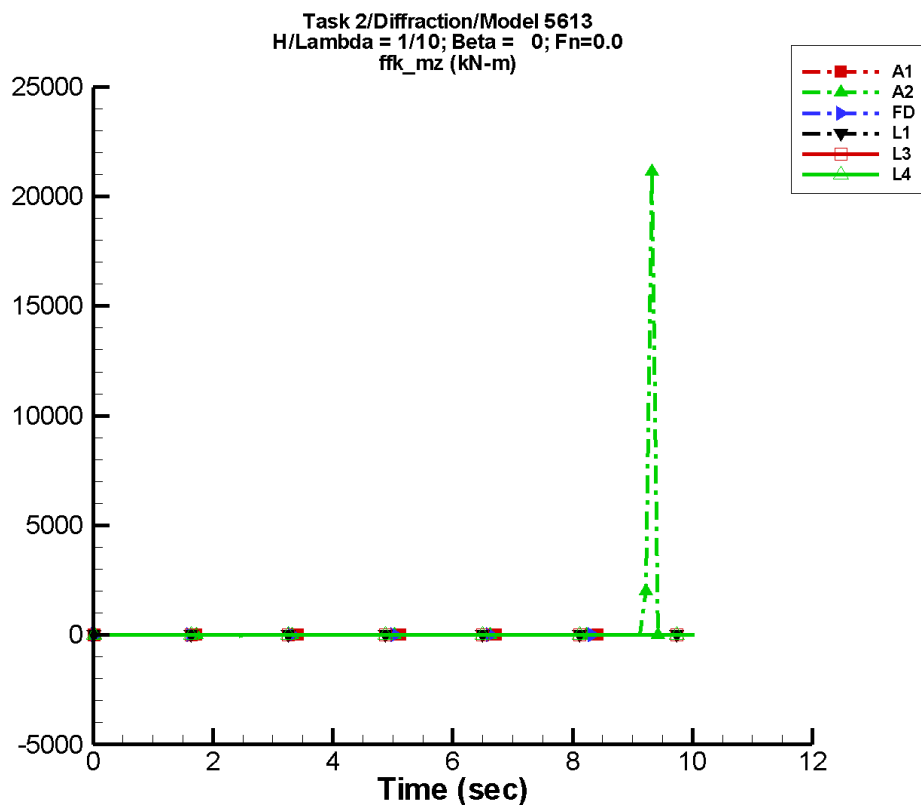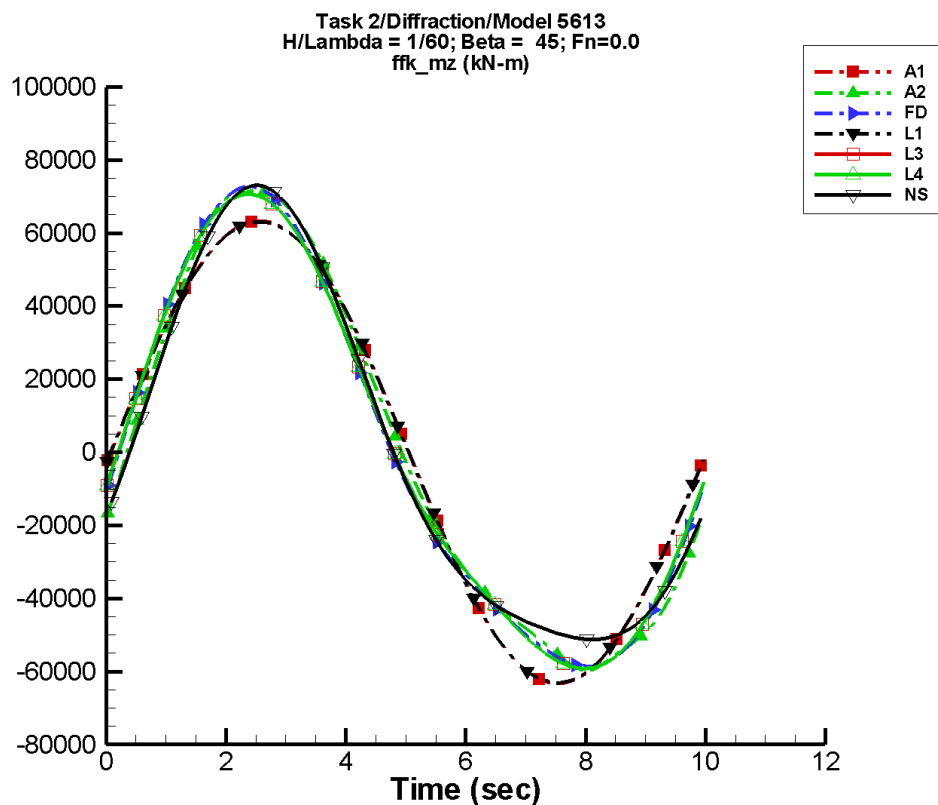
Table G–1623. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-14.7	1.66E+04	72	20.3	-44
A2	-14.7	1.66E+04	72	20.3	-44
FD	-5.56	2.10E+04	67	9.12	103
L1	-1.37E+04	1.76E+04	74	1.90E+04	25
L3	-1.37E+04	1.76E+04	73	1.90E+04	25
L4	5.56E+03	2.86E+04	80	3.52E+04	-11
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1624. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.64E+04	1.66E+04	-1.63E+04	1.63E+04
A2	-1.64E+04	1.66E+04	-1.63E+04	1.63E+04
FD	-2.10E+04	2.10E+04	-2.08E+04	2.08E+04
L1	-3.94E+04	2.23E+04	-3.91E+04	2.20E+04
L3	-3.91E+04	2.23E+04	-3.88E+04	2.20E+04
L4	-7.10E+04	6.52E+04	-6.89E+04	6.13E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 135; Fn=0.0
fdif_y (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–813. Time history of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1625. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.543	912.	99	1.98	22
A2	0.543	912.	99	1.98	22
FD	-0.450	1.06E+03	98	0.493	133
L1	-179.	1.14E+03	98	92.5	74
L3	-179.	1.14E+03	97	92.5	73
L4	105.	1.08E+03	98	179.	57
NF	—	—	—	—	—
NS	145.	685.	100	86.8	-173

Table G–1626. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
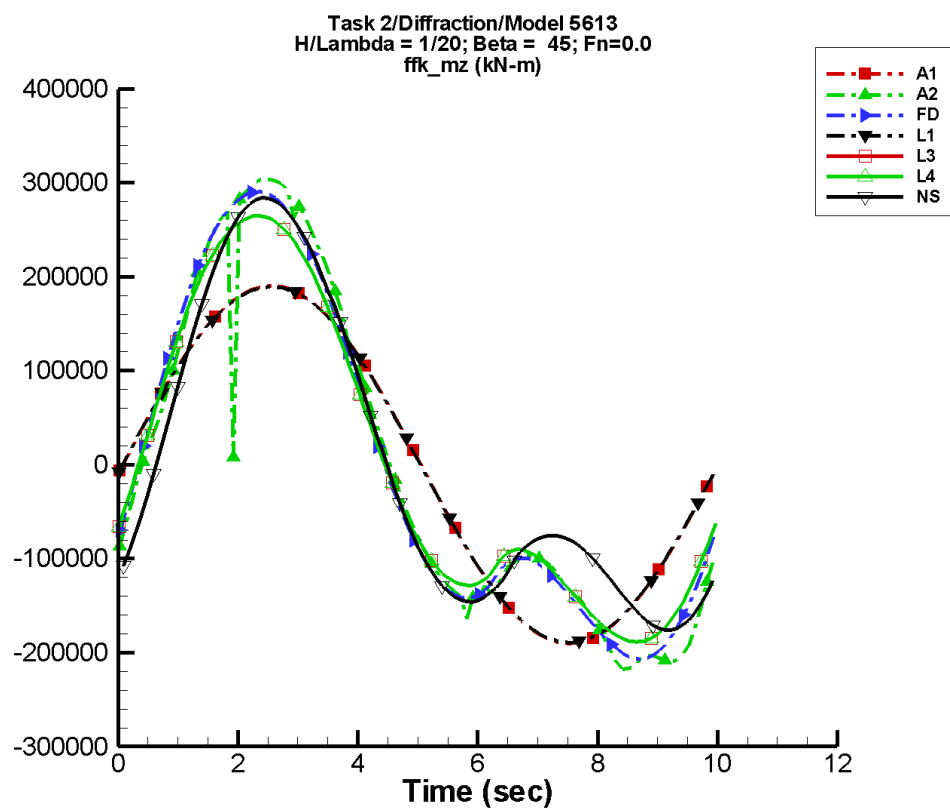
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-901.	906.	-884.	889.
A2	-901.	906.	-884.	889.
FD	-1.06E+03	1.06E+03	-1.05E+03	1.05E+03
L1	-1.24E+03	1.04E+03	-1.24E+03	1.03E+03
L3	-1.24E+03	1.04E+03	-1.24E+03	1.04E+03
L4	-972.	1.43E+03	-898.	1.39E+03
NF	—	—	—	—
NS	-617.	851.	-539.	840.

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 135; Fn=0.0
fdif_y (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–814. Time history of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
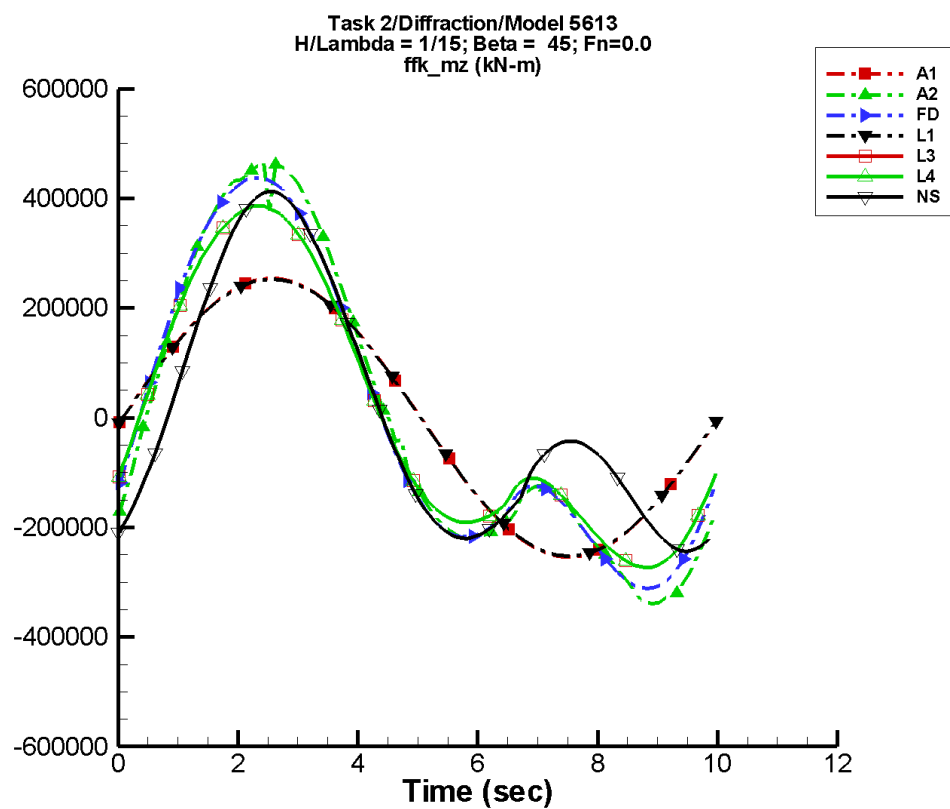
Table G–1627. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.63	2.74E+03	99	5.97	22
A2	1.63	2.74E+03	99	5.97	22
FD	-1.35	3.19E+03	98	1.48	133
L1	-1.61E+03	3.41E+03	98	828.	73
L3	-1.61E+03	3.40E+03	97	828.	73
L4	919.	3.86E+03	96	1.42E+03	61
NF	—	—	—	—	—
NS	1.21E+03	2.42E+03	89	853.	-176

Table G–1628. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.71E+03	2.73E+03	-2.66E+03	2.67E+03
A2	-2.71E+03	2.73E+03	-2.66E+03	2.67E+03
FD	-3.19E+03	3.19E+03	-3.15E+03	3.15E+03
L1	-4.59E+03	2.57E+03	-4.57E+03	2.54E+03
L3	-4.55E+03	2.58E+03	-4.54E+03	2.55E+03
L4	-3.46E+03	6.87E+03	-2.93E+03	6.03E+03
NF	—	—	—	—
NS	-2.79E+03	4.08E+03	-2.14E+03	3.93E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–815. Time history of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
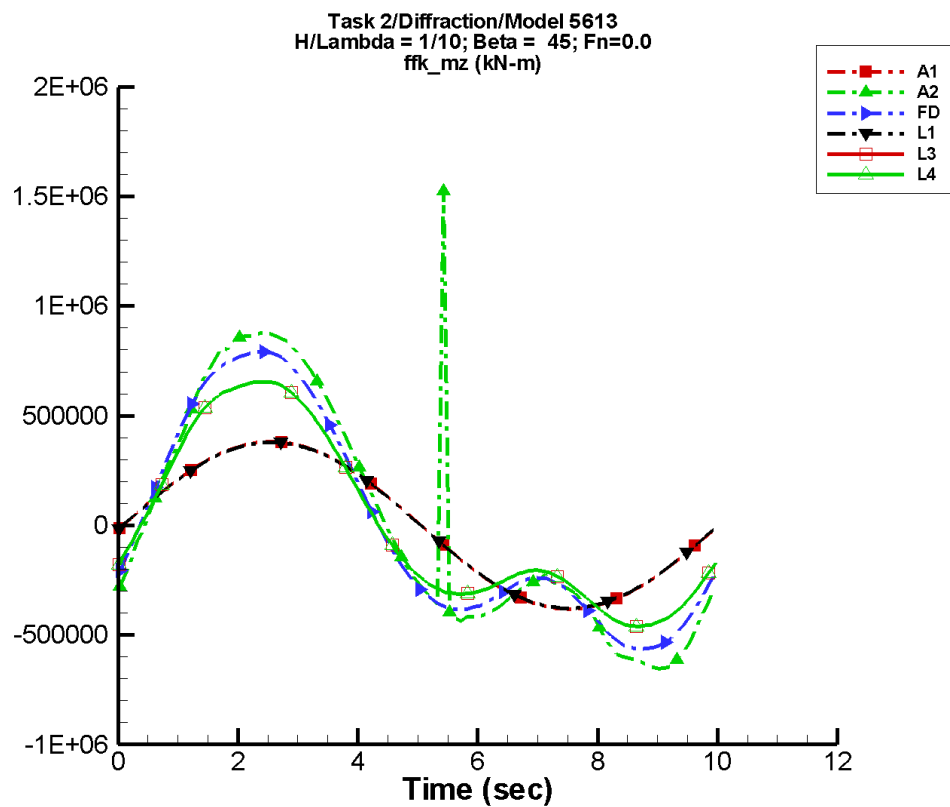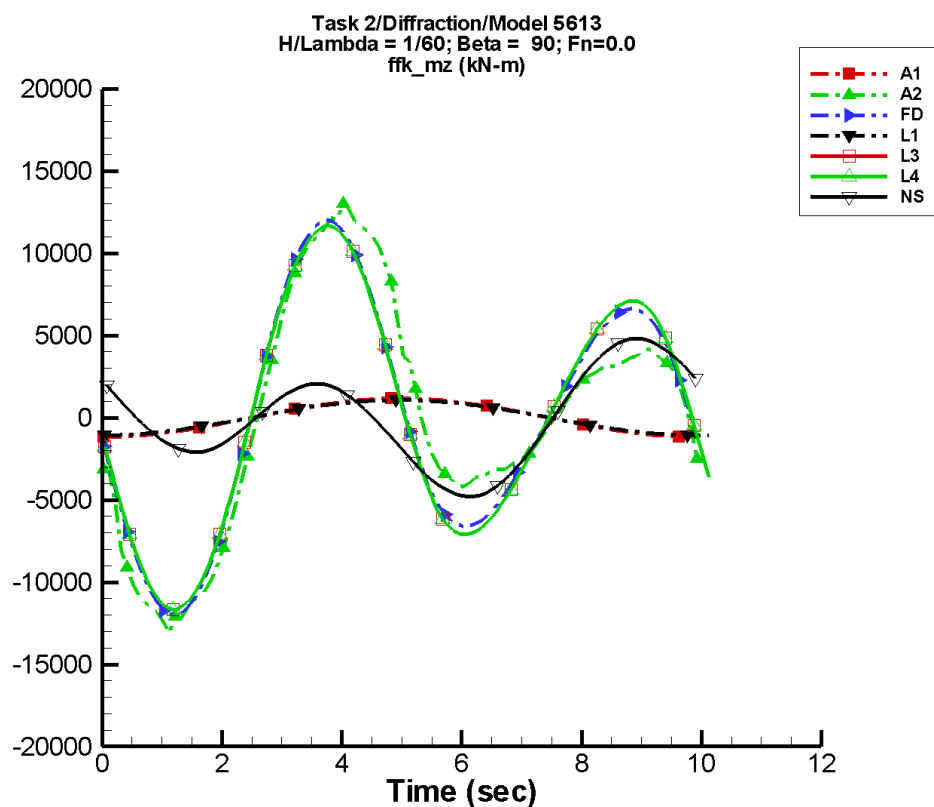
Table G–1629. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	2.18	3.66E+03	99	7.97	22
A2	2.18	3.66E+03	99	7.97	22
FD	-1.80	4.25E+03	98	1.97	133
L1	-2.86E+03	4.54E+03	98	1.47E+03	73
L3	-2.86E+03	4.54E+03	97	1.47E+03	73
L4	1.82E+03	5.81E+03	97	2.12E+03	46
NF	—	—	—	—	—
NS	2.08E+03	3.93E+03	90	1.33E+03	-169

Table G–1630. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-3.62E+03	3.64E+03	-3.55E+03	3.57E+03
A2	-3.62E+03	3.64E+03	-3.55E+03	3.57E+03
FD	-4.25E+03	4.25E+03	-4.21E+03	4.20E+03
L1	-6.89E+03	3.07E+03	-6.87E+03	3.03E+03
L3	-6.83E+03	3.08E+03	-6.81E+03	3.04E+03
L4	-5.62E+03	9.80E+03	-4.48E+03	9.20E+03
NF	—	—	—	—
NS	-3.30E+03	6.65E+03	-3.09E+03	6.53E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 135; Fn=0.0
fdif_y (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–816. Time history of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1631. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	3.27	5.49E+03	99	12.0	22
A2	3.27	5.49E+03	99	12.0	22
FD	-2.70	6.37E+03	98	2.96	133
L1	-6.42E+03	6.81E+03	98	3.31E+03	73
L3	-6.42E+03	6.80E+03	97	3.31E+03	73
L4	3.83E+03	1.17E+04	93	4.93E+03	22
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1632. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
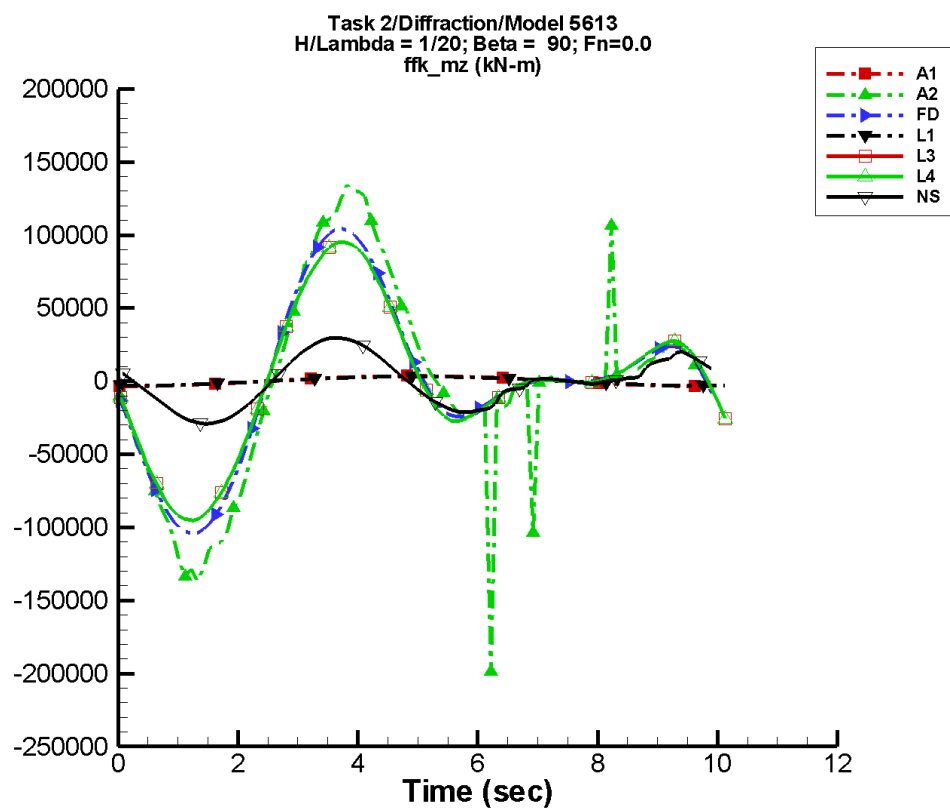
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-5.42E+03	5.46E+03	-5.33E+03	5.36E+03
A2	-5.42E+03	5.46E+03	-5.33E+03	5.36E+03
FD	-6.37E+03	6.37E+03	-6.31E+03	6.31E+03
L1	-1.30E+04	3.54E+03	-1.30E+04	3.47E+03
L3	-1.29E+04	3.56E+03	-1.29E+04	3.49E+03
L4	-1.26E+04	2.10E+04	-9.78E+03	1.98E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–817. Time history of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
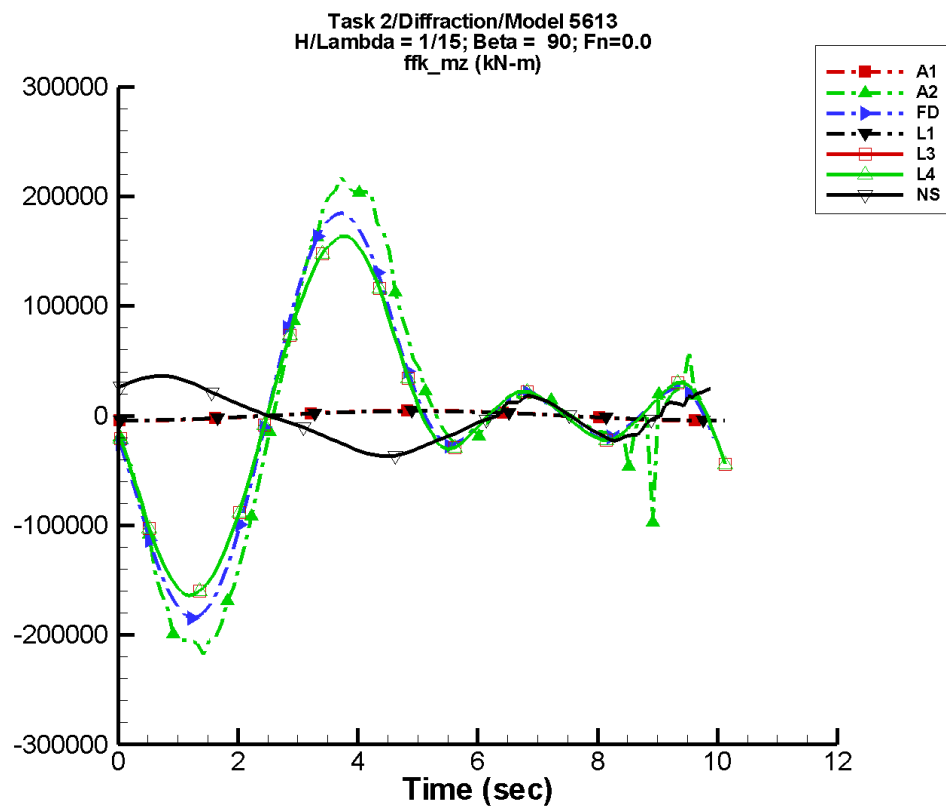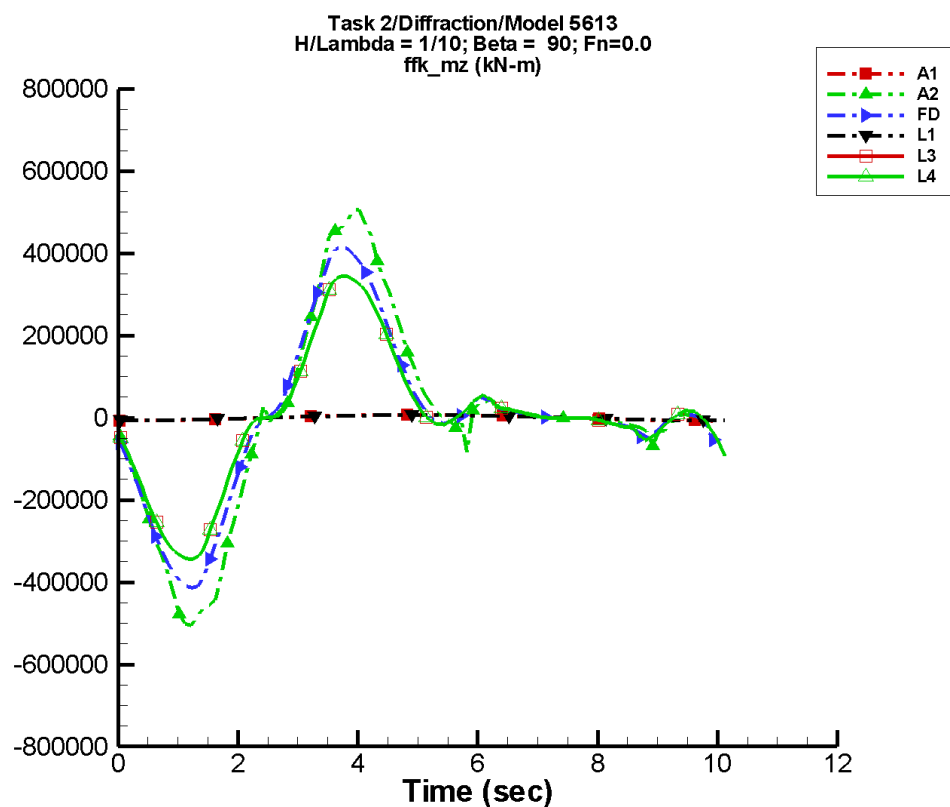
Table G–1633. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	2.97E-05	1.95E-03	-142	8.86E-05	157
A2	2.97E-05	1.95E-03	-142	8.86E-05	157
FD	1.00E-08	2.18E-05	-52	1.03E-08	-21
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.70E-05	3.02E-04	124	2.89E-04	-17

Table G–1634. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.81E-03	2.44E-03	-2.75E-03	2.31E-03
A2	-2.81E-03	2.44E-03	-2.75E-03	2.31E-03
FD	-2.18E-05	2.18E-05	-2.16E-05	2.16E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-2.22E-03	1.69E-03	-9.06E-04	5.09E-04

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–818. Time history of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
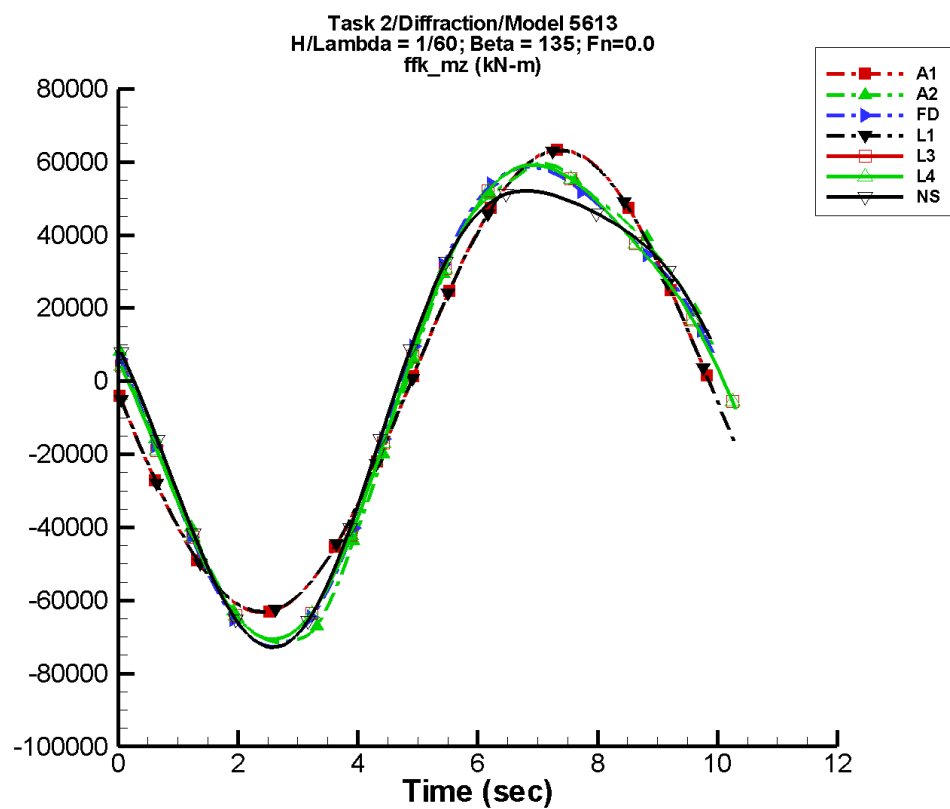
Table G–1635. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	8.95E-05	5.87E-03	-142	2.66E-04	157
A2	8.95E-05	5.87E-03	-142	2.66E-04	157
FD	3.01E-08	6.54E-05	-52	3.09E-08	-21
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	7.05E-05	7.06E-04	111	1.09E-03	-34

Table G–1636. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-8.45E-03	7.35E-03	-8.27E-03	6.95E-03
A2	-8.45E-03	7.35E-03	-8.27E-03	6.95E-03
FD	-6.54E-05	6.54E-05	-6.47E-05	6.47E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.14E-02	9.10E-03	-4.23E-03	4.60E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–819. Time history of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1637. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
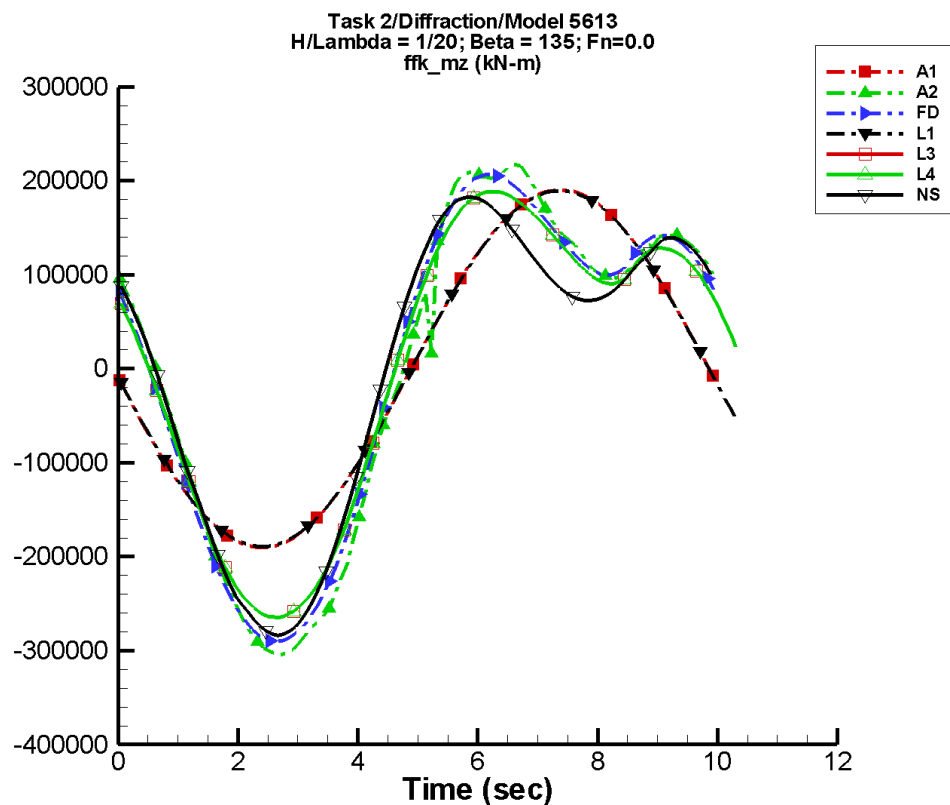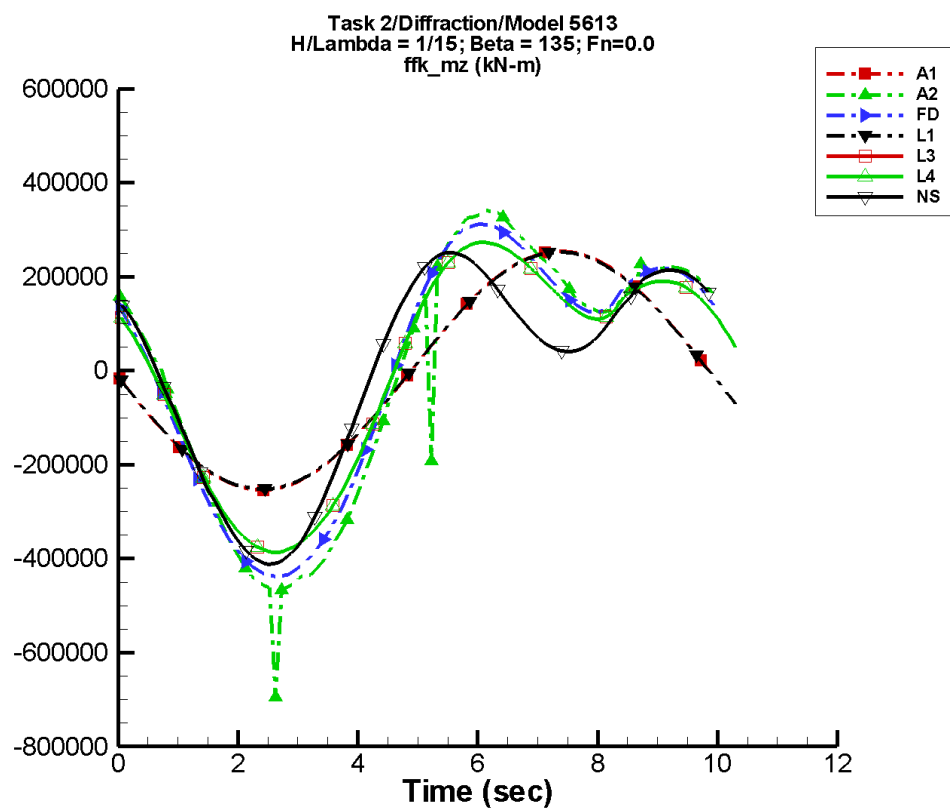
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.19E-04	7.83E-03	-142	3.56E-04	157
A2	1.19E-04	7.83E-03	-142	3.56E-04	157
FD	4.01E-08	8.72E-05	-52	4.12E-08	-21
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.07E-04	1.71E-03	157	1.27E-03	-150

Table G–1638. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.13E-02	9.81E-03	-1.10E-02	9.28E-03
A2	-1.13E-02	9.81E-03	-1.10E-02	9.28E-03
FD	-8.72E-05	8.72E-05	-8.63E-05	8.63E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-7.47E-02	7.31E-02	-3.10E-03	5.28E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–820. Time history of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
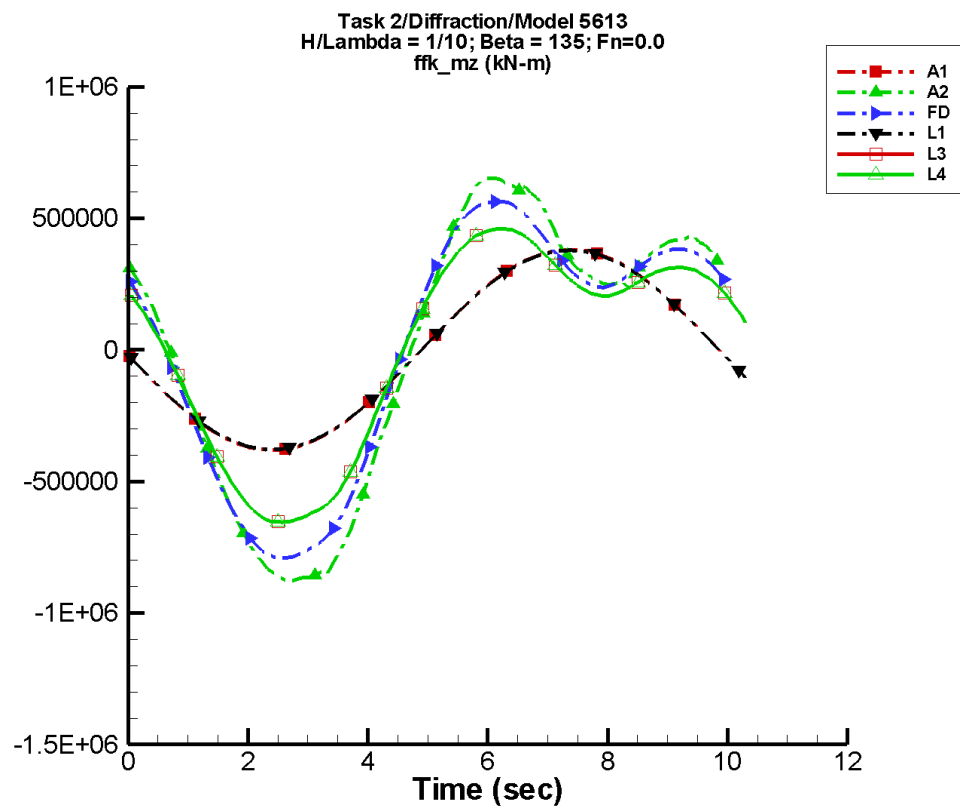
Table G–1639. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.79E-04	1.17E-02	-142	5.34E-04	157
A2	1.79E-04	1.17E-02	-142	5.34E-04	157
FD	6.02E-08	1.31E-04	-52	6.18E-08	-21
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1640. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.69E-02	1.47E-02	-1.66E-02	1.39E-02
A2	-1.69E-02	1.47E-02	-1.66E-02	1.39E-02
FD	-1.31E-04	1.31E-04	-1.29E-04	1.29E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–821. Time history of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
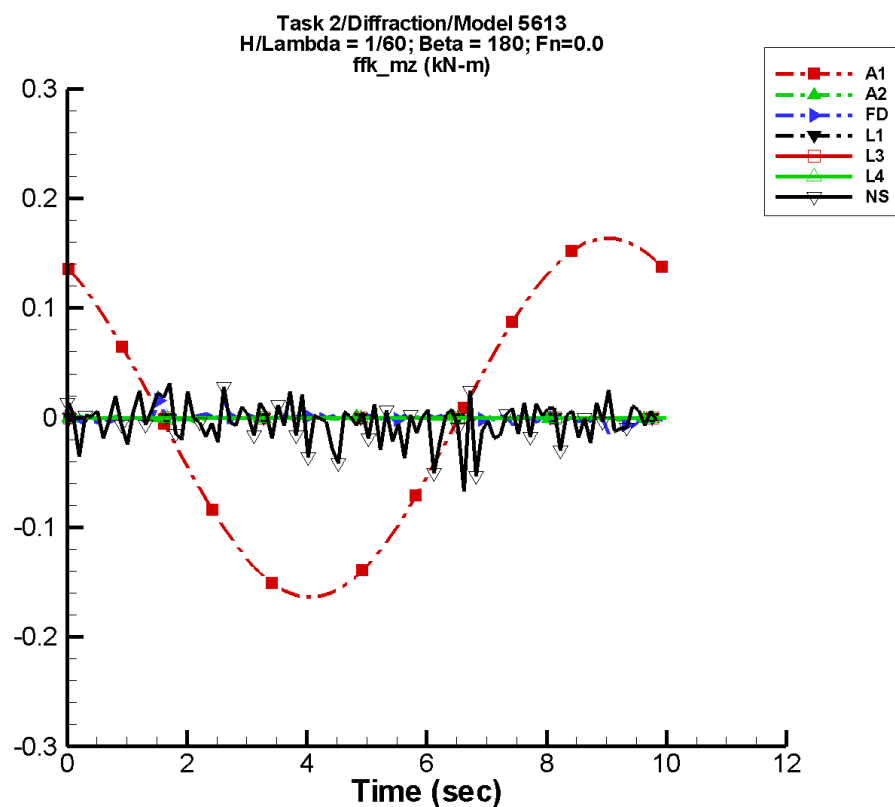
Table G–1641. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-6.34E-05	5.64E-02	-26	5.91E-04	-35
A2	-6.34E-05	5.64E-02	-26	5.91E-04	-35
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	7.79E-06	2.67E-04	6	4.63E-04	-153

Table G–1642. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-5.99E-02	5.91E-02	-5.65E-02	5.61E-02
A2	-5.99E-02	5.91E-02	-5.65E-02	5.61E-02
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-4.29E-03	4.45E-03	-3.56E-03	2.71E-03

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–822. Time history of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1643. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
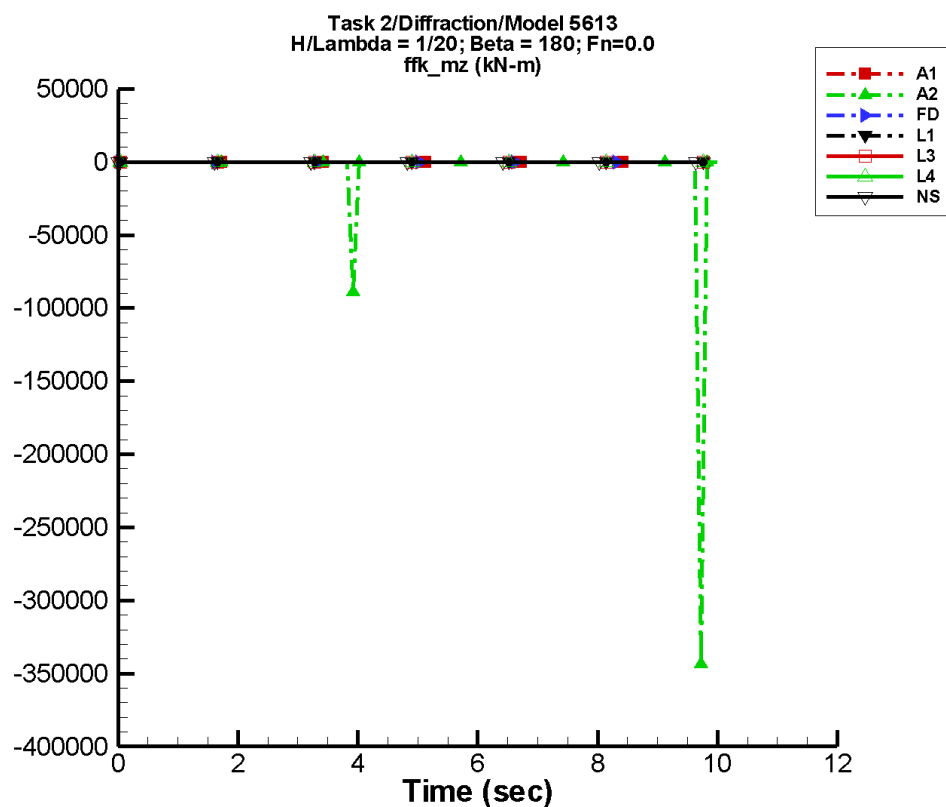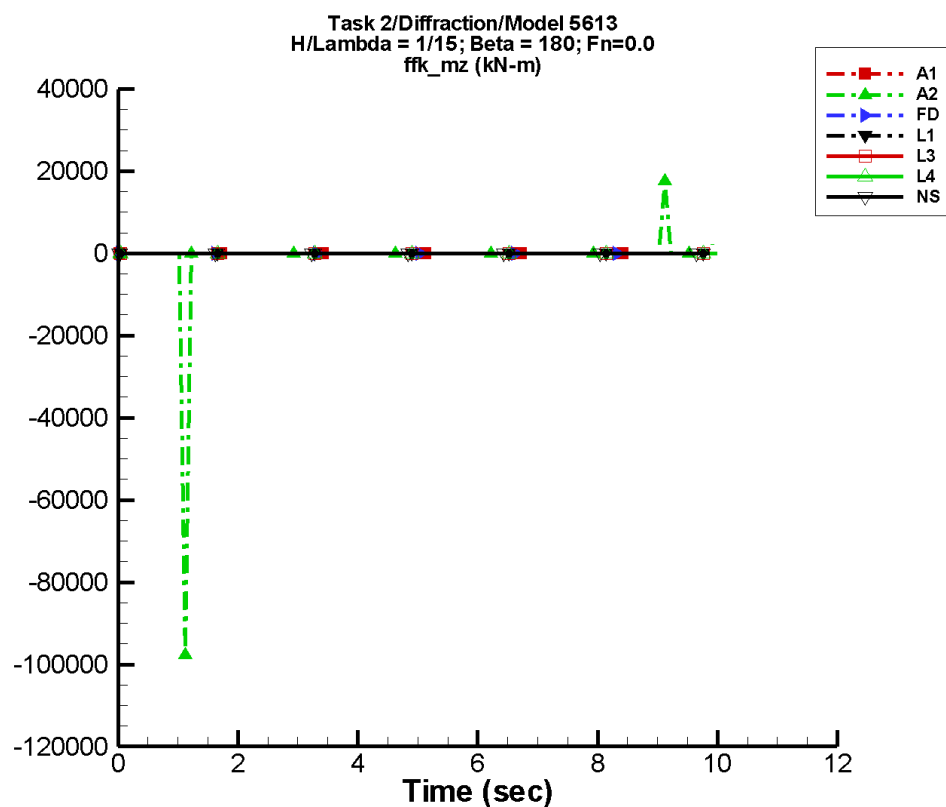
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.91E-04	0.170	-26	1.78E-03	-35
A2	-1.91E-04	0.170	-26	1.78E-03	-35
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-3.09E-04	2.87E-04	-89	2.39E-03	-122

Table G–1644. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-0.180	0.178	-0.170	0.169
A2	-0.180	0.178	-0.170	0.169
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-5.17E-02	4.95E-02	-6.78E-03	3.92E-03

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–823. Time history of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
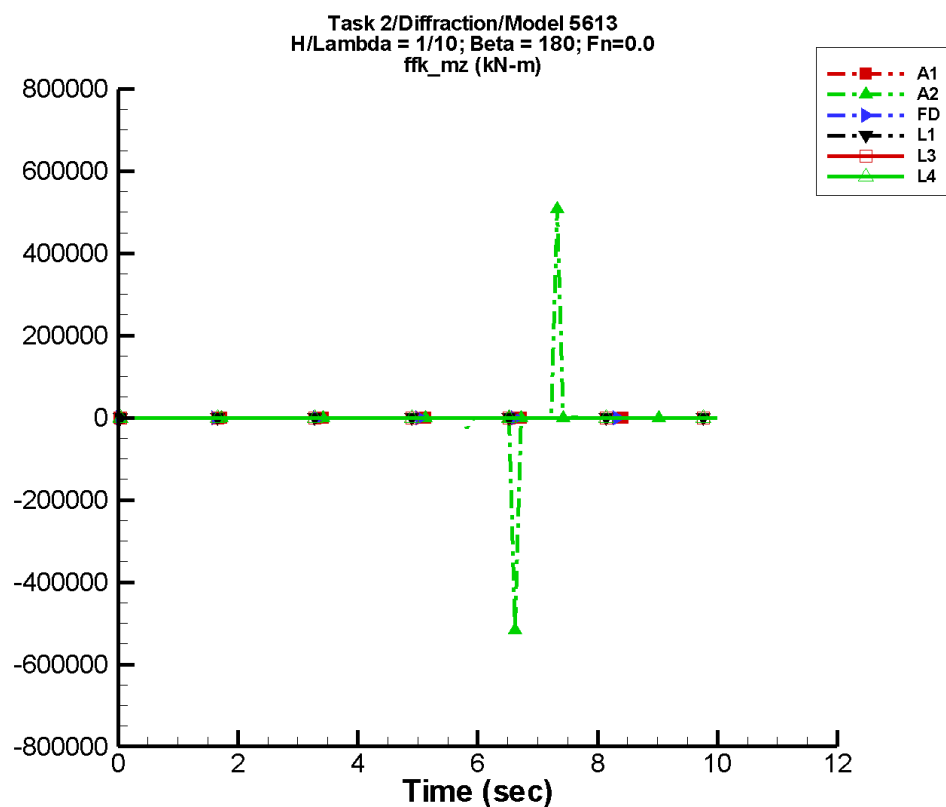
Table G–1645. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-2.55E-04	0.227	-26	2.37E-03	-35
A2	-2.55E-04	0.227	-26	2.37E-03	-35
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	2.17E-06	1.04E-03	-76	1.78E-03	27

Table G–1646. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-0.241	0.237	-0.227	0.225
A2	-0.241	0.237	-0.227	0.225
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.22E-02	1.37E-02	-9.61E-03	7.86E-03

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–824. Time history of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
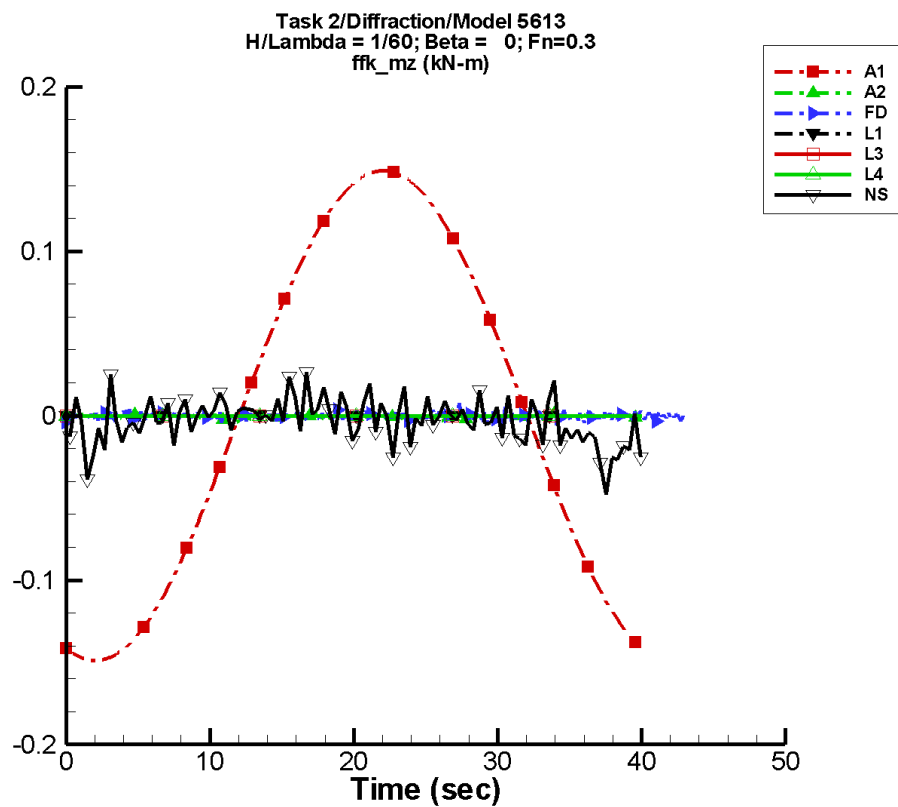
Table G–1647. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-3.82E-04	0.340	-26	3.56E-03	-35
A2	-3.82E-04	0.340	-26	3.56E-03	-35
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1648. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-0.361	0.356	-0.341	0.338
A2	-0.361	0.356	-0.341	0.338
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–825. Time history of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1649. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
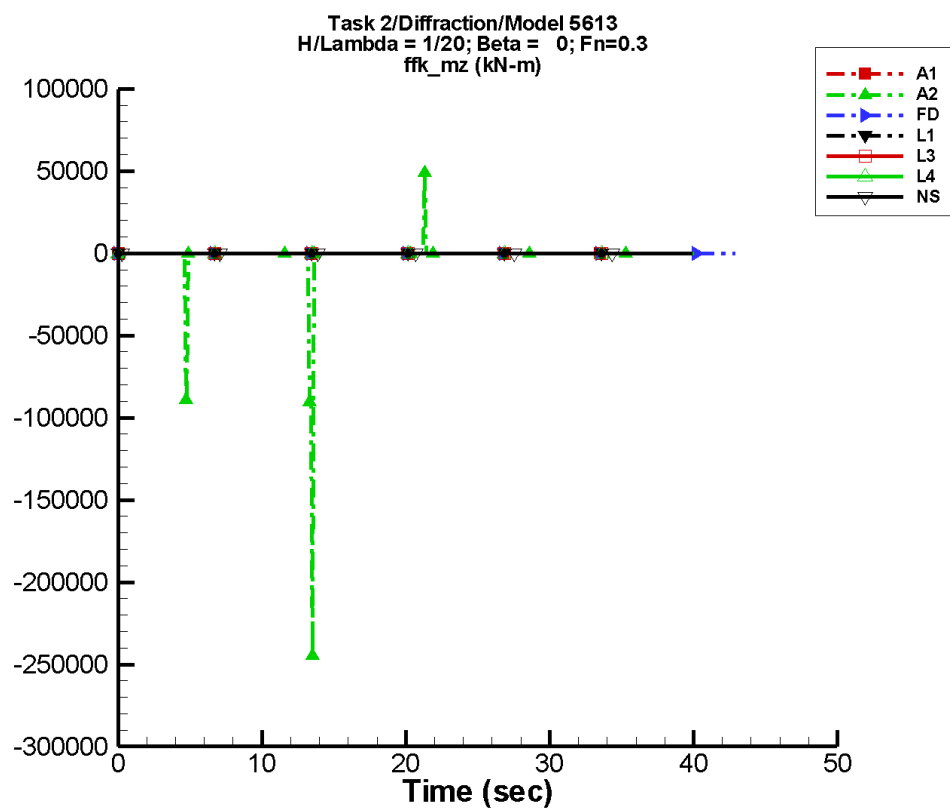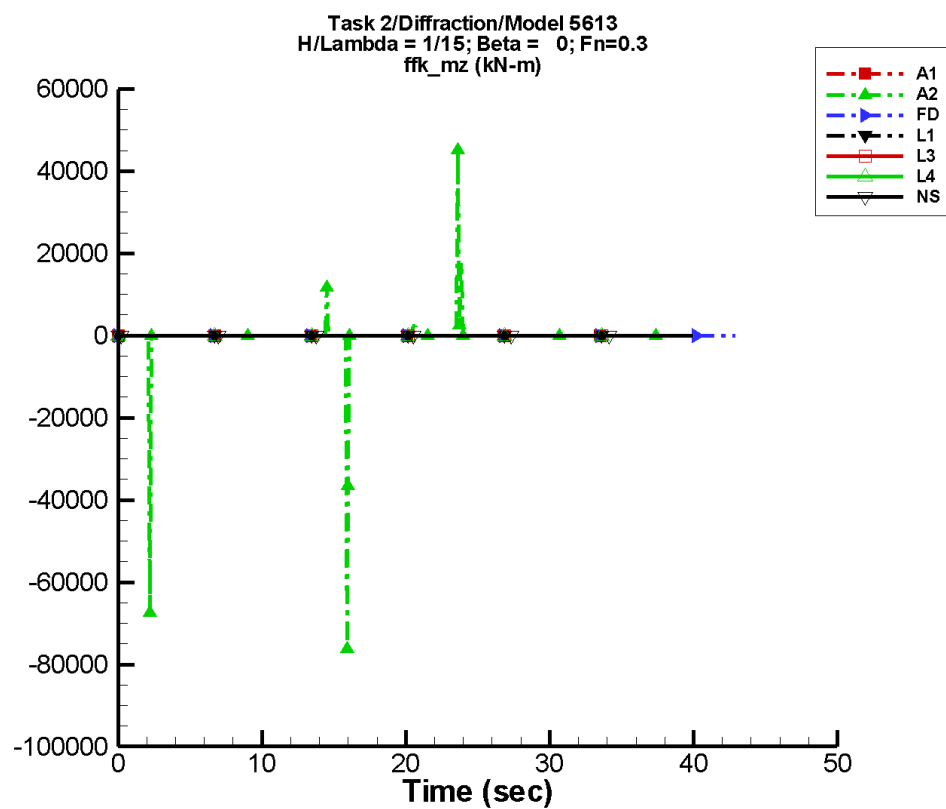
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.470	333.	25	0.601	-99
A2	0.470	333.	25	0.601	-99
FD	0.113	459.	62	0.184	148
L1	-196.	463.	60	40.4	160
L3	-196.	463.	60	40.4	160
L4	25.5	445.	61	35.3	-144
NF	—	—	—	—	—
NS	72.9	939.	74	73.0	-147

Table G–1650. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-361.	361.	-358.	358.
A2	-361.	361.	-358.	358.
FD	-459.	459.	-458.	458.
L1	-688.	248.	-687.	247.
L3	-687.	246.	-687.	246.
L4	-649.	573.	-482.	456.
NF	—	—	—	—
NS	-933.	977.	-923.	951.

Data identically zero, insufficient, or not available from NFA.

Figure G–826. Time history of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
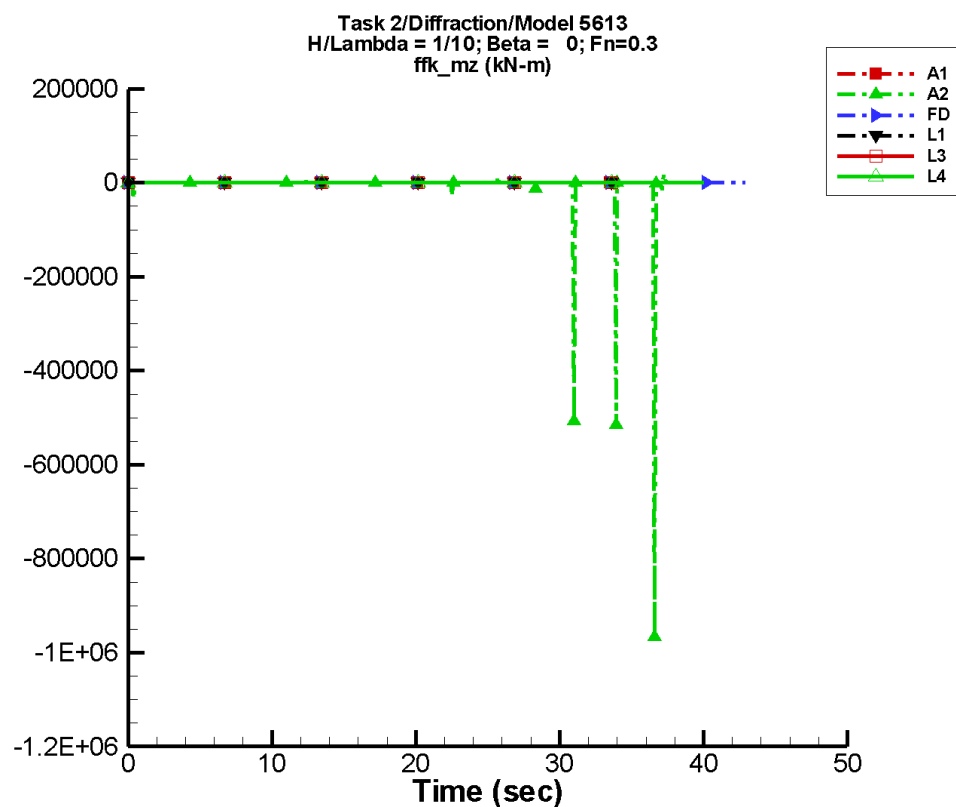
Table G–1651. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.41	1.00E+03	25	1.81	-99
A2	1.41	1.00E+03	25	1.81	-99
FD	0.340	1.38E+03	62	0.552	148
L1	-1.76E+03	1.39E+03	60	363.	160
L3	-1.76E+03	1.39E+03	60	363.	160
L4	554.	1.18E+03	73	279.	172
NF	—	—	—	—	—
NS	653.	3.68E+03	76	747.	-174

Table G–1652. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.09E+03	1.08E+03	-1.08E+03	1.08E+03
A2	-1.09E+03	1.08E+03	-1.08E+03	1.08E+03
FD	-1.38E+03	1.38E+03	-1.37E+03	1.37E+03
L1	-3.45E+03	-429.	-3.44E+03	-427.
L3	-3.45E+03	-436.	-3.44E+03	-435.
L4	-2.03E+03	2.09E+03	-1.22E+03	1.96E+03
NF	—	—	—	—
NS	-3.74E+03	4.77E+03	-3.68E+03	4.43E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–827. Time history of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
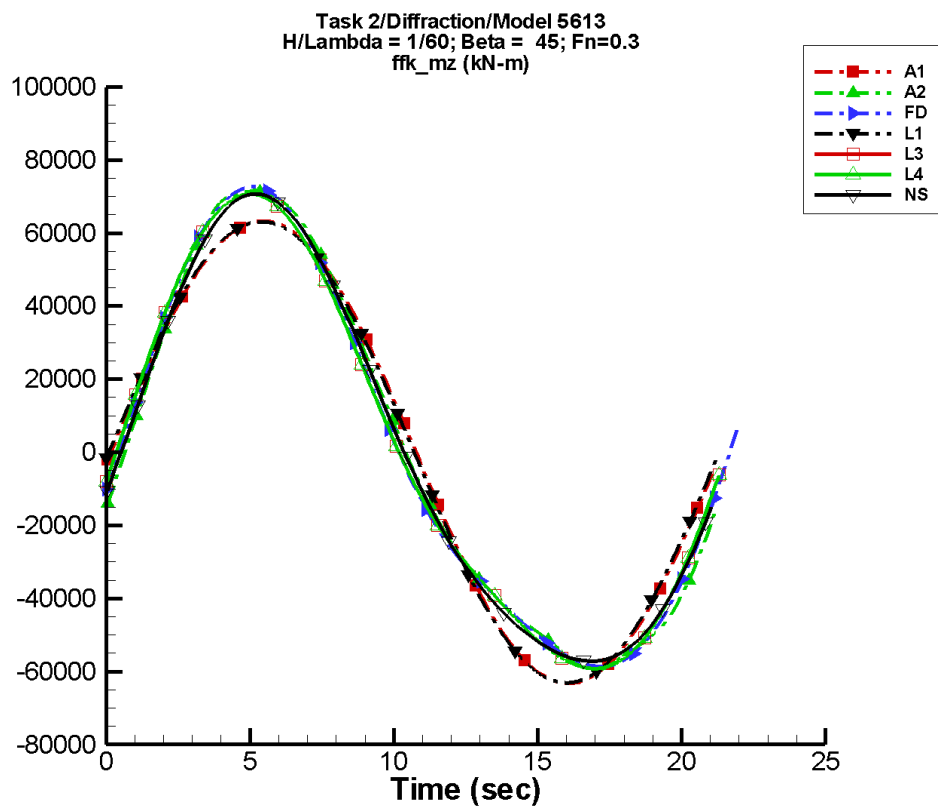
Table G–1653. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.89	1.34E+03	25	2.41	-99
A2	1.89	1.34E+03	25	2.41	-99
FD	0.453	1.84E+03	62	0.736	148
L1	-3.13E+03	1.85E+03	60	645.	160
L3	-3.13E+03	1.85E+03	60	645.	160
L4	1.29E+03	1.38E+03	91	443.	177
NF	—	—	—	—	—
NS	1.10E+03	5.58E+03	75	1.46E+03	-177

Table G–1654. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.45E+03	1.45E+03	-1.44E+03	1.44E+03
A2	-1.45E+03	1.45E+03	-1.44E+03	1.44E+03
FD	-1.84E+03	1.84E+03	-1.83E+03	1.83E+03
L1	-5.52E+03	-1.28E+03	-5.52E+03	-1.28E+03
L3	-5.53E+03	-1.29E+03	-5.52E+03	-1.30E+03
L4	-4.15E+03	3.82E+03	-603.	3.36E+03
NF	—	—	—	—
NS	-6.01E+03	7.68E+03	-5.94E+03	6.97E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 45; Fn=0.3
fdif_y (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–828. Time history of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
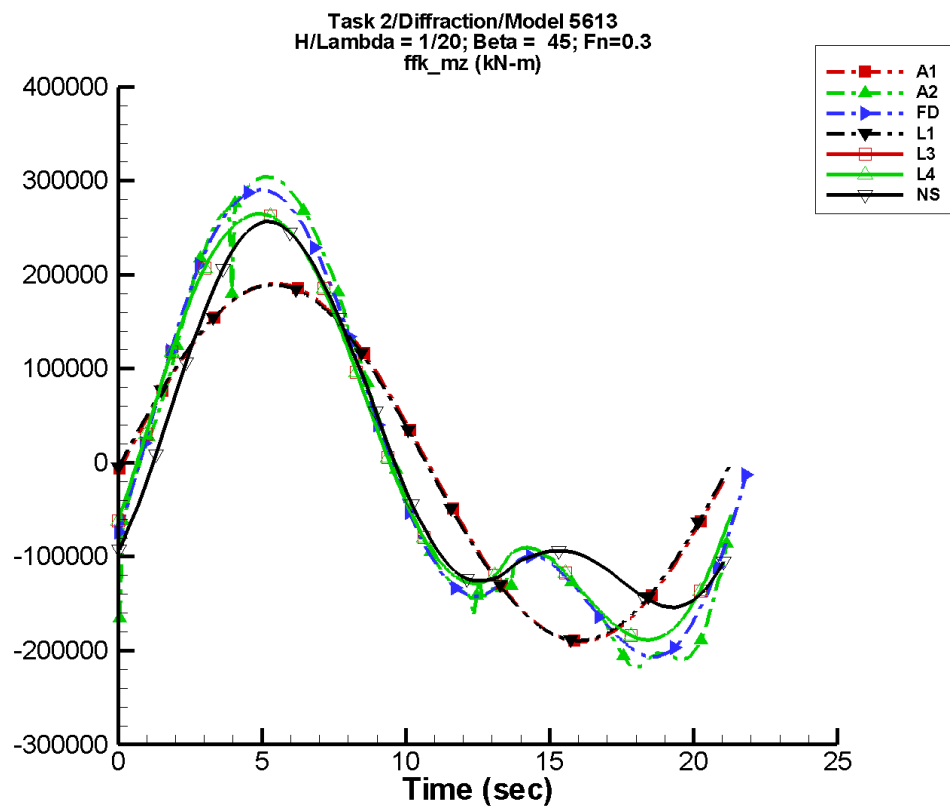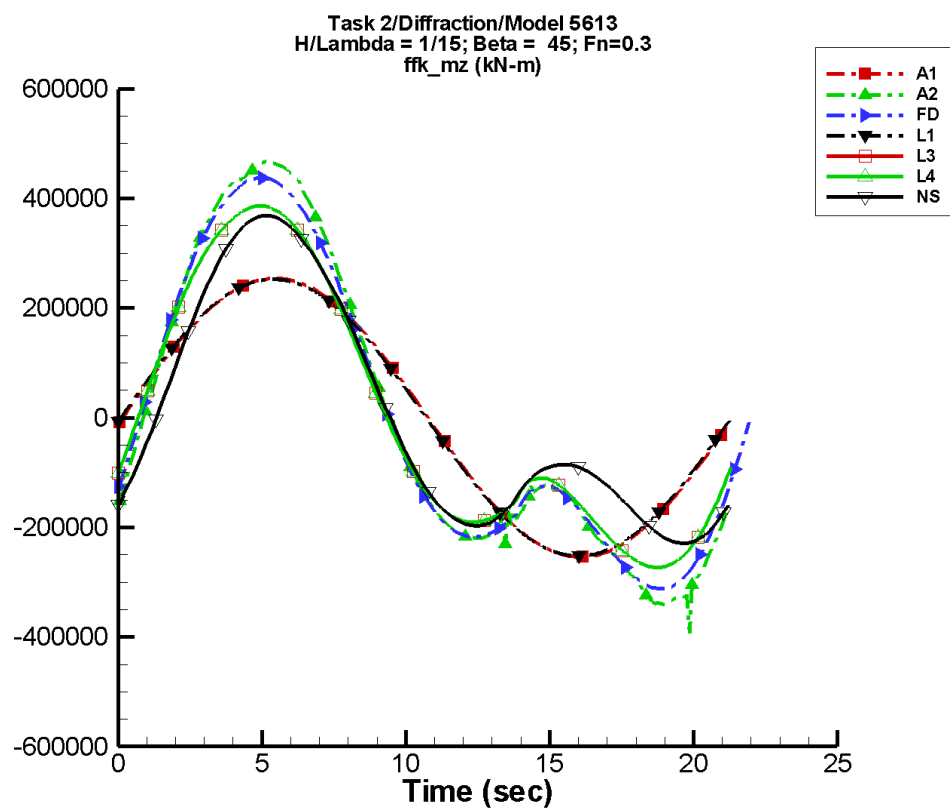
Table G–1655. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	2.83	2.00E+03	25	3.62	-99
A2	2.83	2.00E+03	25	3.62	-99
FD	0.679	2.75E+03	62	1.10	149
L1	-7.05E+03	2.78E+03	60	1.45E+03	160
L3	-7.05E+03	2.77E+03	60	1.45E+03	160
L4	3.02E+03	1.79E+03	87	1.41E+03	150
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1656. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.18E+03	2.17E+03	-2.16E+03	2.15E+03
A2	-2.18E+03	2.17E+03	-2.16E+03	2.15E+03
FD	-2.75E+03	2.75E+03	-2.75E+03	2.75E+03
L1	-1.11E+04	-3.95E+03	-1.11E+04	-3.96E+03
L3	-1.11E+04	-3.97E+03	-1.11E+04	-3.98E+03
L4	-3.37E+03	2.00E+04	-71.2	8.18E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.3
fdif_y (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–829. Time history of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
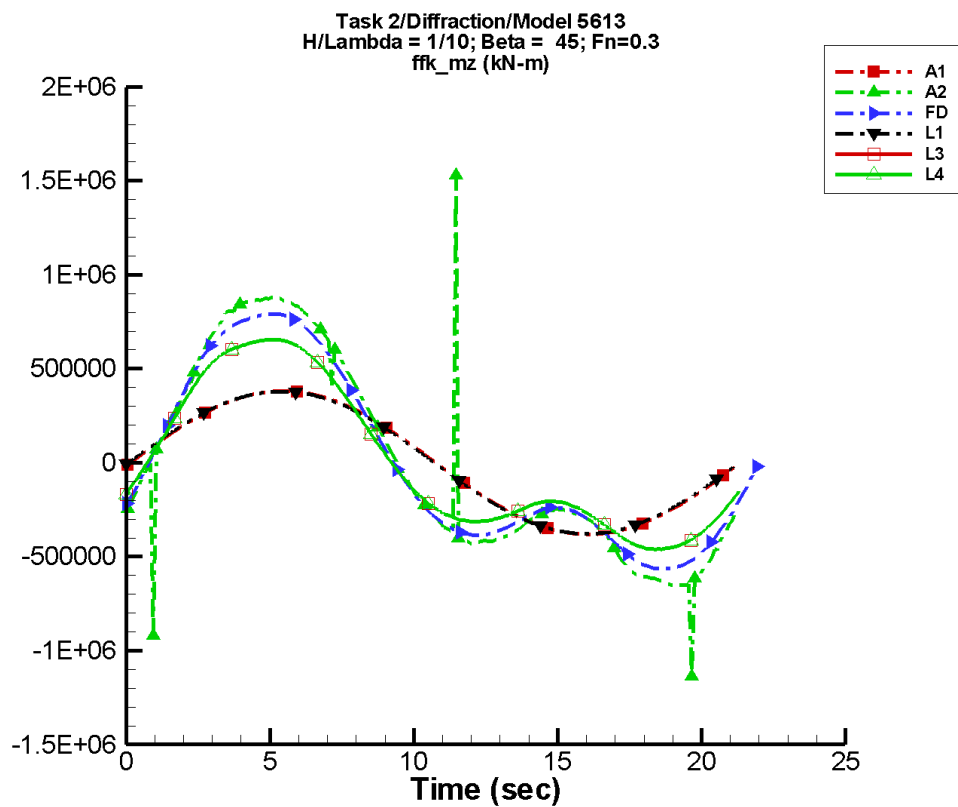
Table G–1657. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-0.555	2.59E+03	58	6.10	-1
A2	-0.555	2.59E+03	58	6.10	-1
FD	-0.927	3.50E+03	67	1.52	103
L1	-213.	2.46E+03	64	409.	4
L3	-213.	2.45E+03	63	409.	4
L4	202.	2.40E+03	65	601.	-19
NF	—	—	—	—	—
NS	84.1	2.16E+03	92	356.	-18

Table G–1658. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.61E+03	2.61E+03	-2.58E+03	2.58E+03
A2	-2.61E+03	2.61E+03	-2.58E+03	2.58E+03
FD	-3.50E+03	3.50E+03	-3.46E+03	3.46E+03
L1	-2.41E+03	2.61E+03	-2.40E+03	2.60E+03
L3	-2.39E+03	2.61E+03	-2.38E+03	2.60E+03
L4	-2.39E+03	3.25E+03	-2.20E+03	2.97E+03
NF	—	—	—	—
NS	-2.36E+03	2.15E+03	-2.28E+03	2.15E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–830. Time history of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
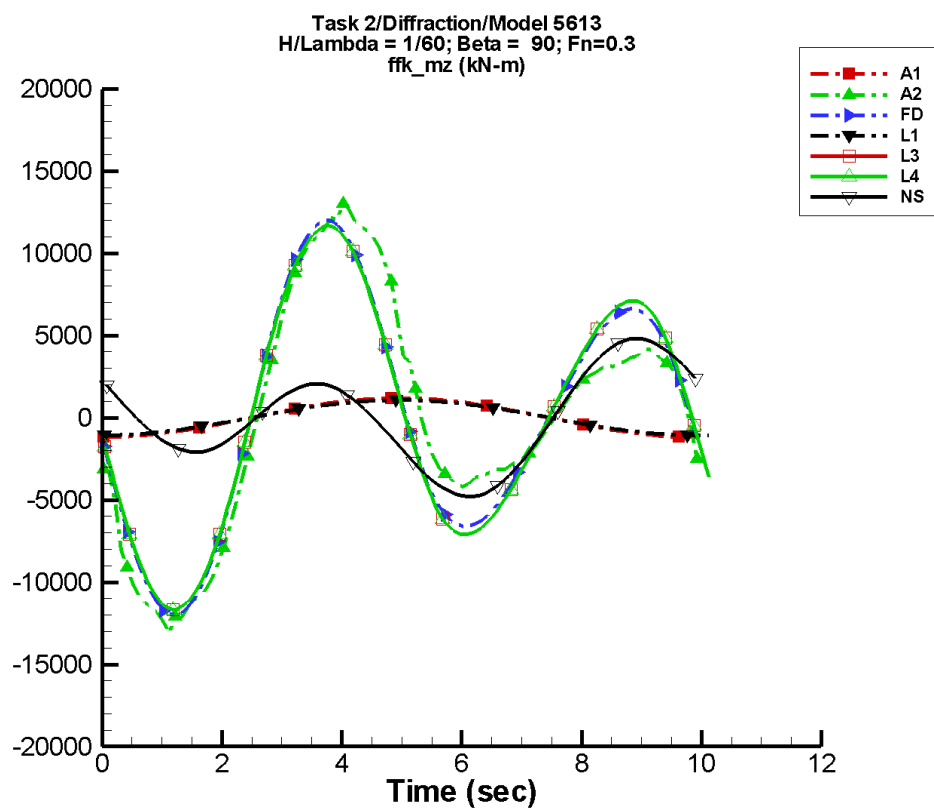
Table G–1659. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-1.67	7.78E+03	58	18.4	-1
A2	-1.67	7.78E+03	58	18.4	-1
FD	-2.78	1.05E+04	67	4.56	103
L1	-1.92E+03	7.38E+03	64	3.68E+03	4
L3	-1.92E+03	7.36E+03	63	3.68E+03	4
L4	1.91E+03	7.70E+03	61	5.97E+03	-27
NF	—	—	—	—	—
NS	484.	6.97E+03	87	3.59E+03	-19

Table G–1660. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
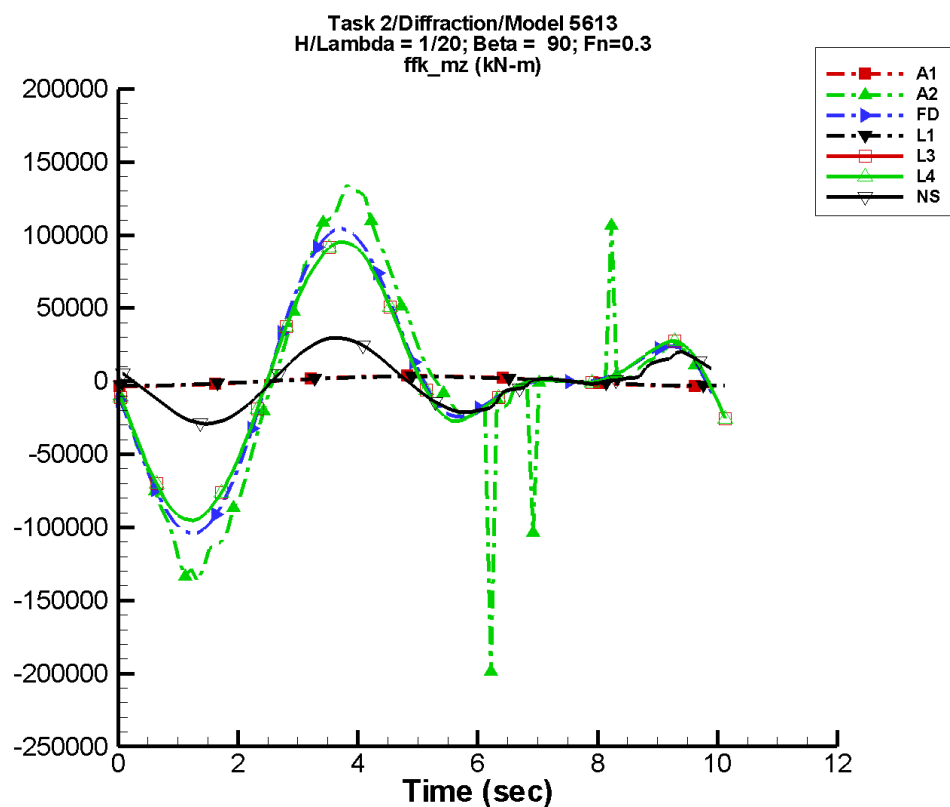
Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-7.85E+03	7.85E+03	-7.76E+03	7.76E+03
A2	-7.85E+03	7.85E+03	-7.76E+03	7.76E+03
FD	-1.05E+04	1.05E+04	-1.04E+04	1.04E+04
L1	-9.18E+03	8.93E+03	-9.13E+03	8.85E+03
L3	-9.05E+03	8.94E+03	-9.00E+03	8.86E+03
L4	-1.03E+04	1.50E+04	-1.01E+04	1.49E+04
NF	—	—	—	—
NS	-1.18E+04	9.65E+03	-1.03E+04	8.69E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–831. Time history of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
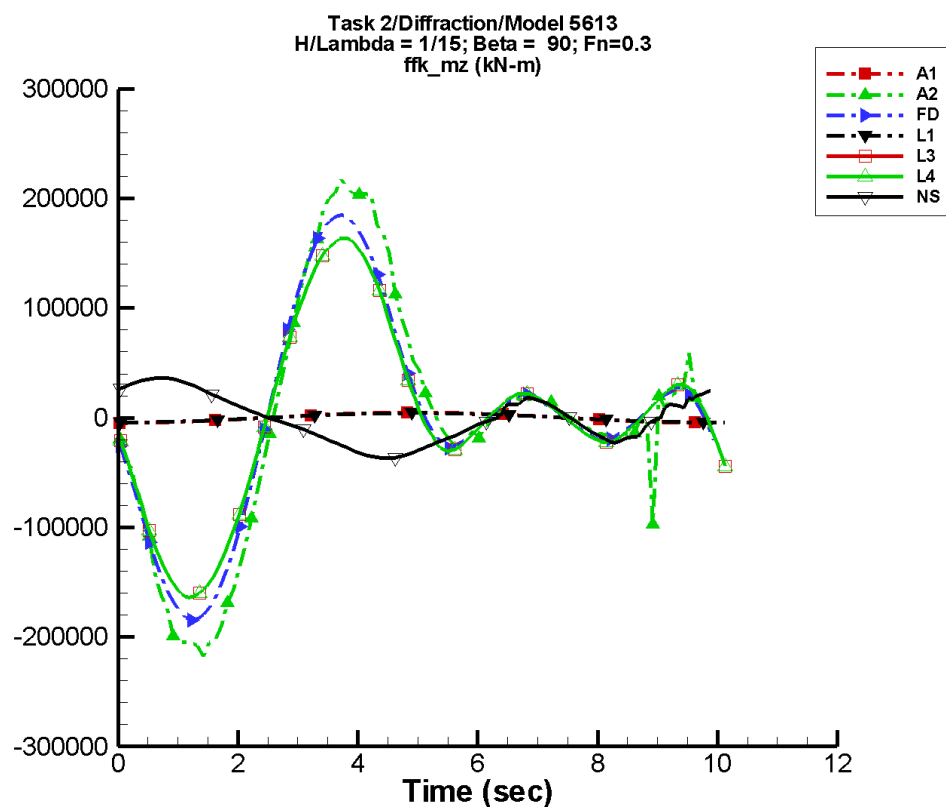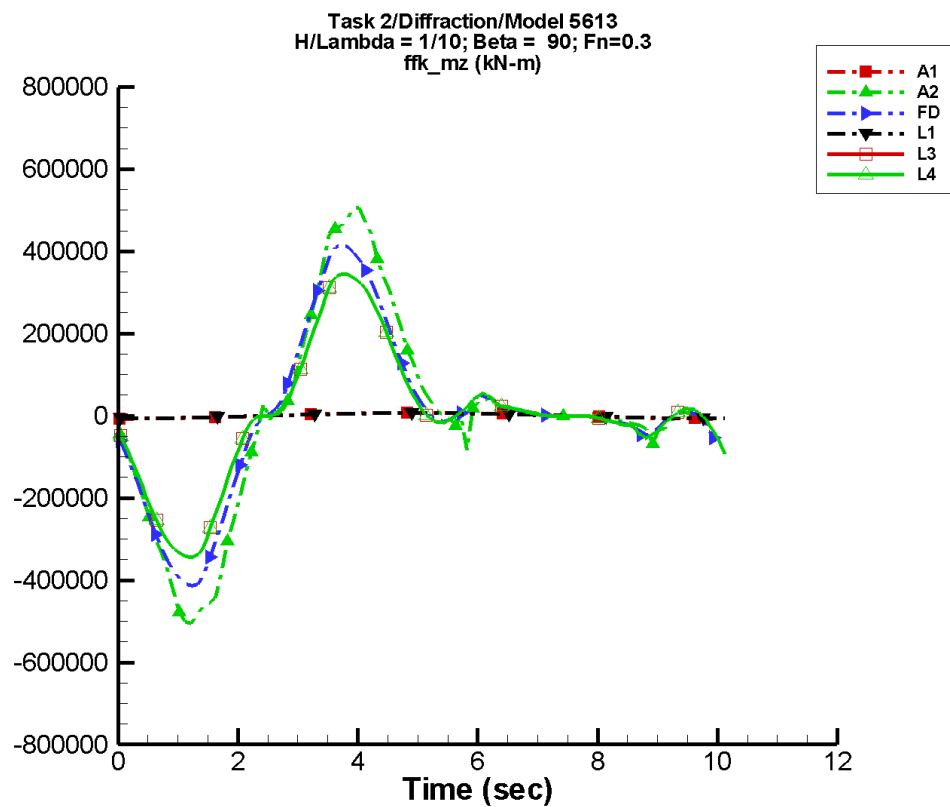
Table G–1661. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-2.23	1.04E+04	58	24.5	-1
A2	-2.23	1.04E+04	58	24.5	-1
FD	-3.71	1.40E+04	67	6.08	103
L1	-3.40E+03	9.83E+03	64	6.53E+03	4
L3	-3.40E+03	9.81E+03	63	6.53E+03	4
L4	3.63E+03	1.10E+04	59	1.05E+04	-29
NF	—	—	—	—	—
NS	273.	9.77E+03	91	6.39E+03	-17

Table G–1662. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.05E+04	1.05E+04	-1.04E+04	1.04E+04
A2	-1.05E+04	1.05E+04	-1.04E+04	1.04E+04
FD	-1.40E+04	1.40E+04	-1.38E+04	1.38E+04
L1	-1.43E+04	1.27E+04	-1.42E+04	1.25E+04
L3	-1.41E+04	1.27E+04	-1.40E+04	1.25E+04
L4	-1.69E+04	2.52E+04	-1.65E+04	2.48E+04
NF	—	—	—	—
NS	-1.86E+04	1.24E+04	-1.79E+04	1.19E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.3
fdif_y (kN)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–832. Time history of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
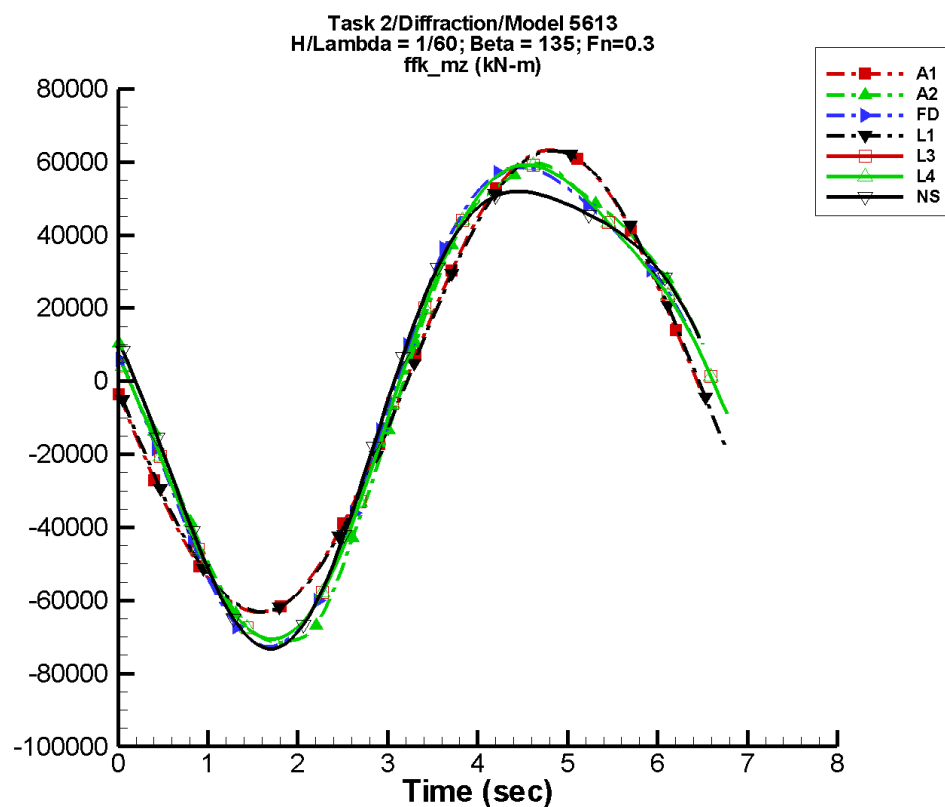
Table G–1663. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-3.34	1.56E+04	58	36.8	-1
A2	-3.34	1.56E+04	58	36.8	-1
FD	-5.56	2.10E+04	67	9.13	103
L1	-7.66E+03	1.47E+04	64	1.47E+04	4
L3	-7.66E+03	1.47E+04	63	1.47E+04	4
L4	8.16E+03	2.06E+04	52	2.23E+04	-28
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1664. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.57E+04	1.57E+04	-1.55E+04	1.55E+04
A2	-1.57E+04	1.57E+04	-1.55E+04	1.55E+04
FD	-2.10E+04	2.10E+04	-2.08E+04	2.08E+04
L1	-2.81E+04	2.13E+04	-2.79E+04	2.10E+04
L3	-2.79E+04	2.13E+04	-2.77E+04	2.10E+04
L4	-3.42E+04	5.57E+04	-3.36E+04	5.47E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–833. Time history of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1665. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
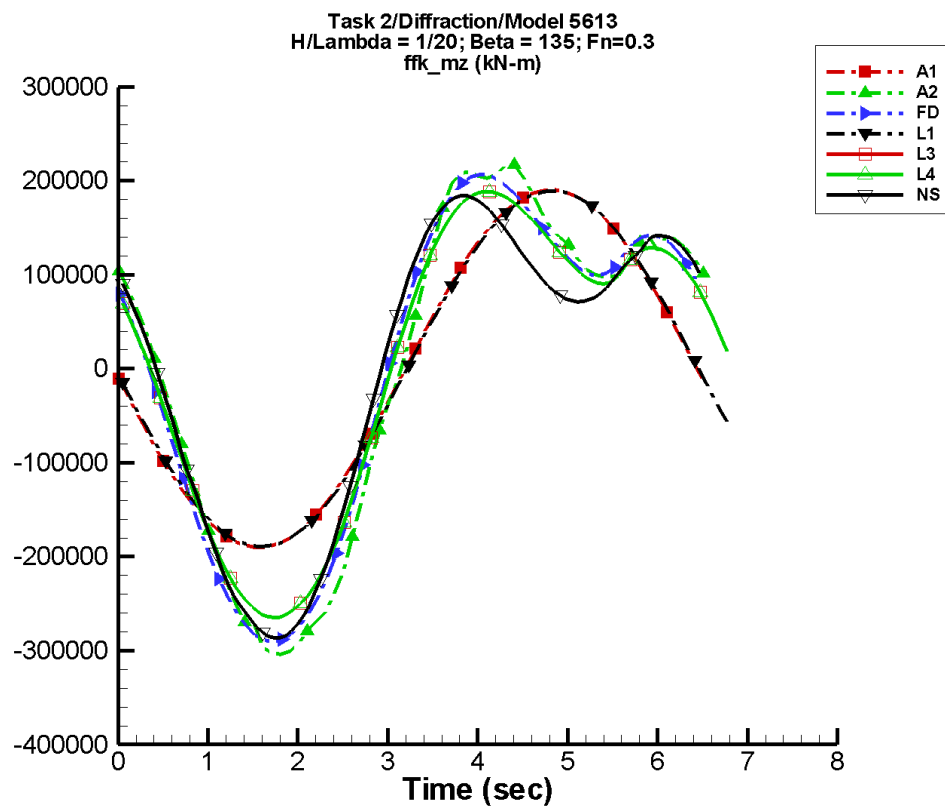
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	0.347	1.46E+03	77	13.1	34
A2	0.347	1.46E+03	77	13.1	34
FD	5.97E-02	1.61E+03	86	7.96E-02	-140
L1	-124.	1.19E+03	81	2.47	-42
L3	-124.	1.19E+03	79	2.49	-42
L4	131.	1.03E+03	87	125.	-157
NF	—	—	—	—	—
NS	80.1	51.7	56	70.3	-146

Table G–1666. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.45E+03	1.48E+03	-1.42E+03	1.48E+03
A2	-1.45E+03	1.48E+03	-1.42E+03	1.48E+03
FD	-1.61E+03	1.61E+03	-1.57E+03	1.61E+03
L1	-1.32E+03	1.07E+03	-1.31E+03	1.08E+03
L3	-1.32E+03	1.07E+03	-1.31E+03	1.08E+03
L4	-957.	1.28E+03	-931.	1.12E+03
NF	—	—	—	—
NS	-162.	200.	-127.	174.

Data identically zero, insufficient, or not available from NFA.

Figure G–834. Time history of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
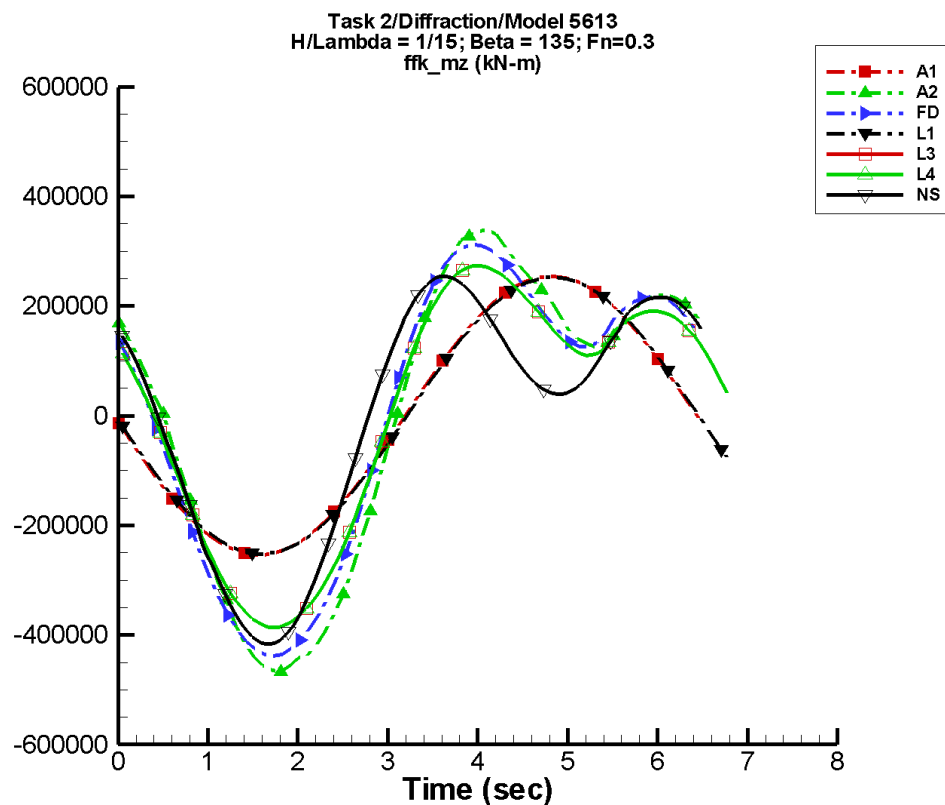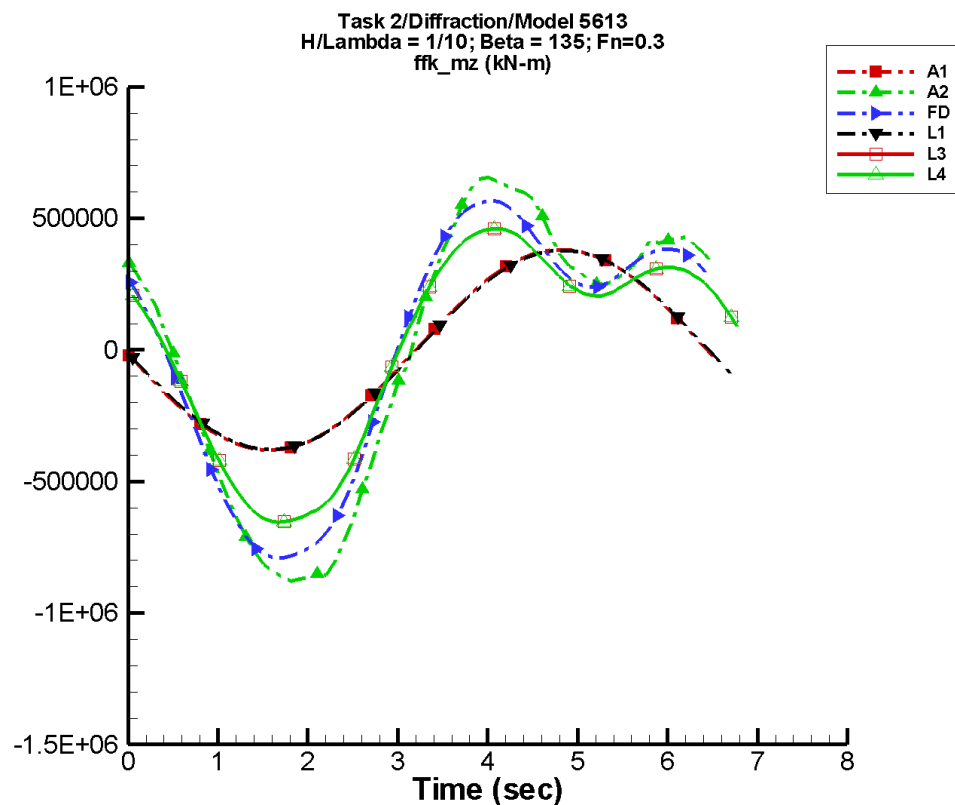
Table G–1667. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.04	4.38E+03	77	39.5	34
A2	1.04	4.38E+03	77	39.5	34
FD	0.179	4.82E+03	86	0.239	-140
L1	-1.12E+03	3.58E+03	81	21.7	-42
L3	-1.12E+03	3.57E+03	79	21.7	-42
L4	1.43E+03	3.31E+03	76	1.07E+03	167
NF	—	—	—	—	—
NS	510.	821.	-76	924.	-130

Table G–1668. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-4.36E+03	4.44E+03	-4.26E+03	4.46E+03
A2	-4.36E+03	4.44E+03	-4.26E+03	4.46E+03
FD	-4.82E+03	4.82E+03	-4.71E+03	4.82E+03
L1	-4.71E+03	2.46E+03	-4.68E+03	2.49E+03
L3	-4.70E+03	2.45E+03	-4.67E+03	2.48E+03
L4	-2.90E+03	7.42E+03	-2.71E+03	5.07E+03
NF	—	—	—	—
NS	-1.46E+03	2.51E+03	-1.13E+03	2.05E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–835. Time history of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
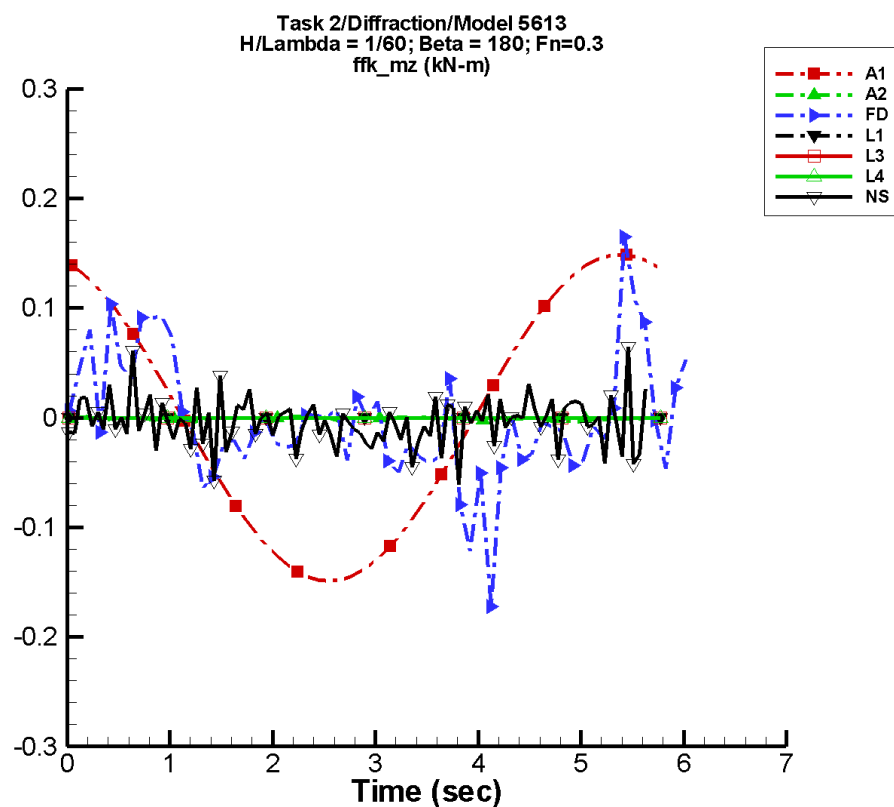
Table G–1669. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.39	5.85E+03	77	52.8	34
A2	1.39	5.85E+03	77	52.8	34
FD	0.239	6.43E+03	86	0.319	-140
L1	-1.99E+03	4.77E+03	81	38.4	-42
L3	-1.99E+03	4.76E+03	79	38.4	-42
L4	2.85E+03	4.69E+03	71	1.71E+03	167
NF	—	—	—	—	—
NS	889.	1.17E+03	-21	1.79E+03	-121

Table G–1670. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-5.83E+03	5.93E+03	-5.69E+03	5.95E+03
A2	-5.83E+03	5.93E+03	-5.69E+03	5.95E+03
FD	-6.43E+03	6.42E+03	-6.27E+03	6.42E+03
L1	-6.78E+03	2.77E+03	-6.74E+03	2.81E+03
L3	-6.76E+03	2.76E+03	-6.72E+03	2.80E+03
L4	-4.29E+03	8.63E+03	-3.55E+03	7.79E+03
NF	—	—	—	—
NS	-2.05E+03	3.86E+03	-1.39E+03	3.34E+03

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–836. Time history of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1671. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
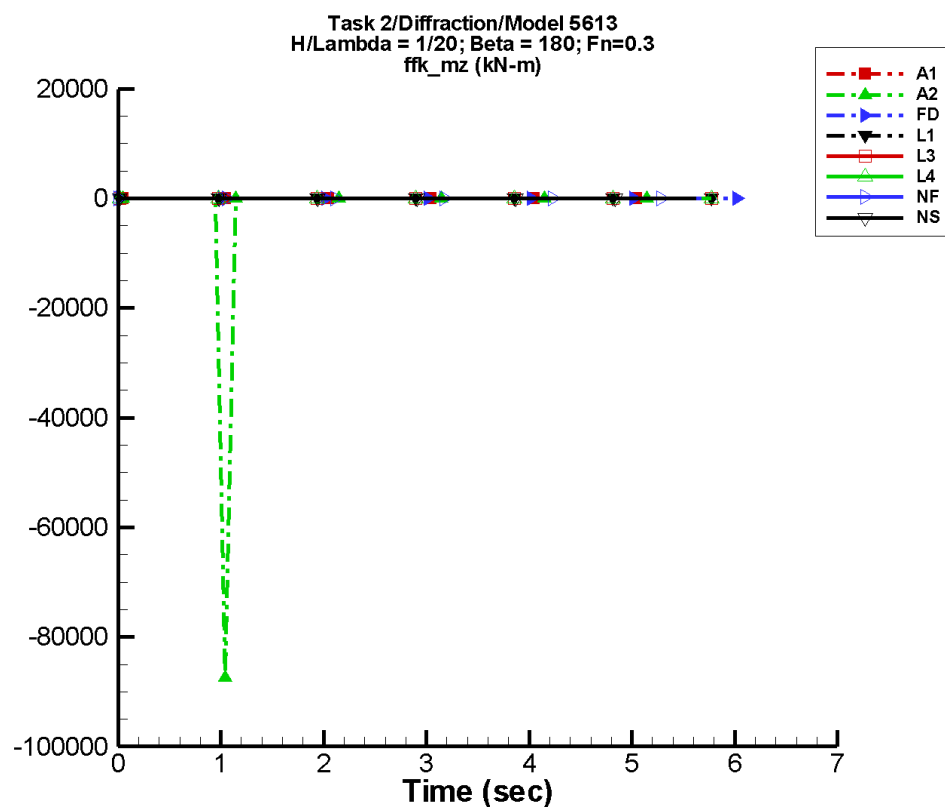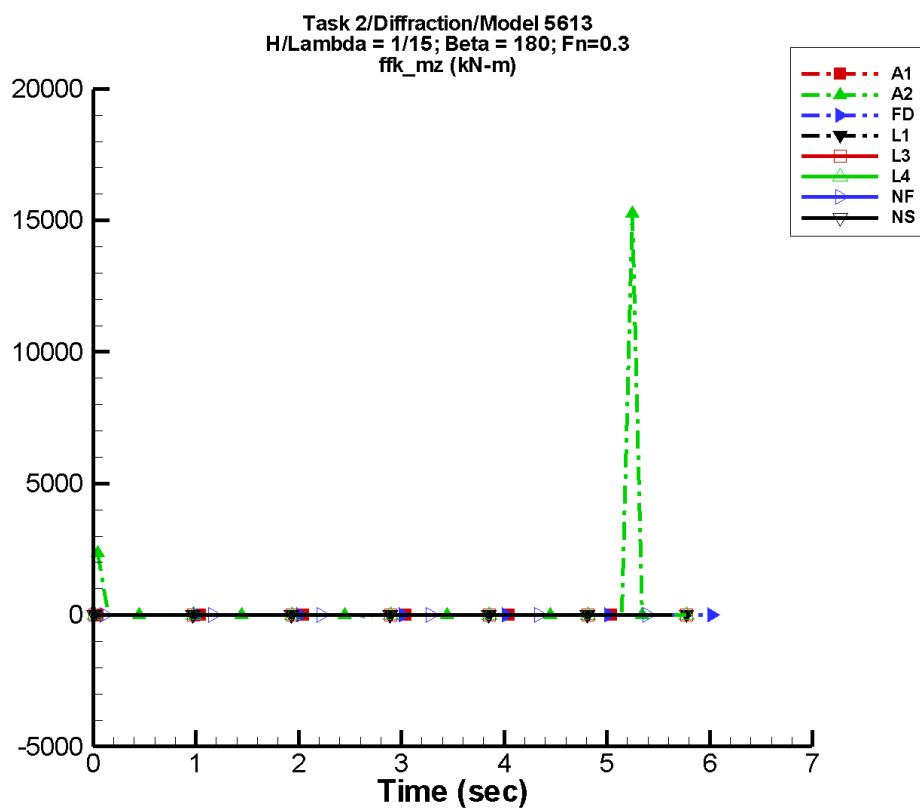
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	2.09	8.78E+03	77	79.2	34
A2	2.09	8.78E+03	77	79.2	34
FD	0.359	9.64E+03	86	0.478	-140
L1	-4.47E+03	7.16E+03	81	86.1	-42
L3	-4.47E+03	7.15E+03	79	86.1	-41
L4	6.79E+03	9.31E+03	59	3.63E+03	178
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1672. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-8.74E+03	8.90E+03	-8.54E+03	8.93E+03
A2	-8.74E+03	8.90E+03	-8.54E+03	8.93E+03
FD	-9.64E+03	9.63E+03	-9.41E+03	9.63E+03
L1	-1.17E+04	2.66E+03	-1.16E+04	2.72E+03
L3	-1.16E+04	2.65E+03	-1.16E+04	2.70E+03
L4	-1.04E+04	1.64E+04	-6.48E+03	1.56E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–837. Time history of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
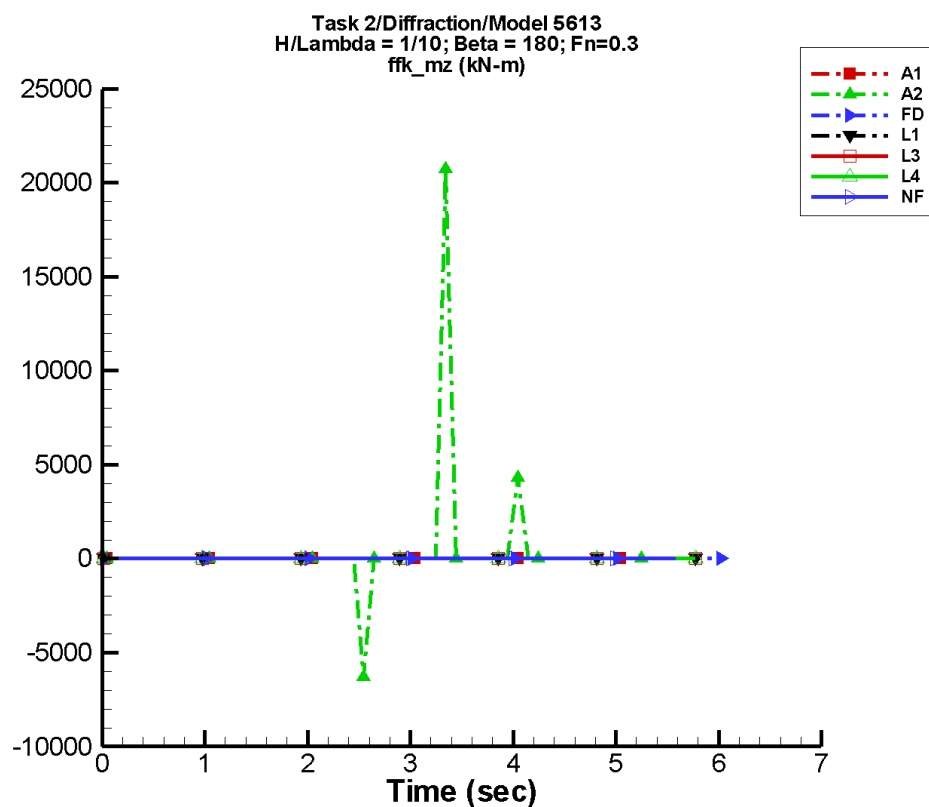
Table G–1673. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.96E-04	6.09E-02	-152	3.07E-04	119
A2	1.96E-04	6.09E-02	-152	3.07E-04	119
FD	5.04E-08	5.16E-05	-95	7.50E-08	-132
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	4.81E-05	2.75E-05	126	1.87E-04	-93

Table G–1674. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-6.12E-02	6.08E-02	-5.90E-02	5.89E-02
A2	-6.12E-02	6.08E-02	-5.90E-02	5.89E-02
FD	-5.15E-05	5.16E-05	-5.00E-05	5.00E-05
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.67E-02	1.45E-02	-8.33E-04	2.05E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–838. Time history of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
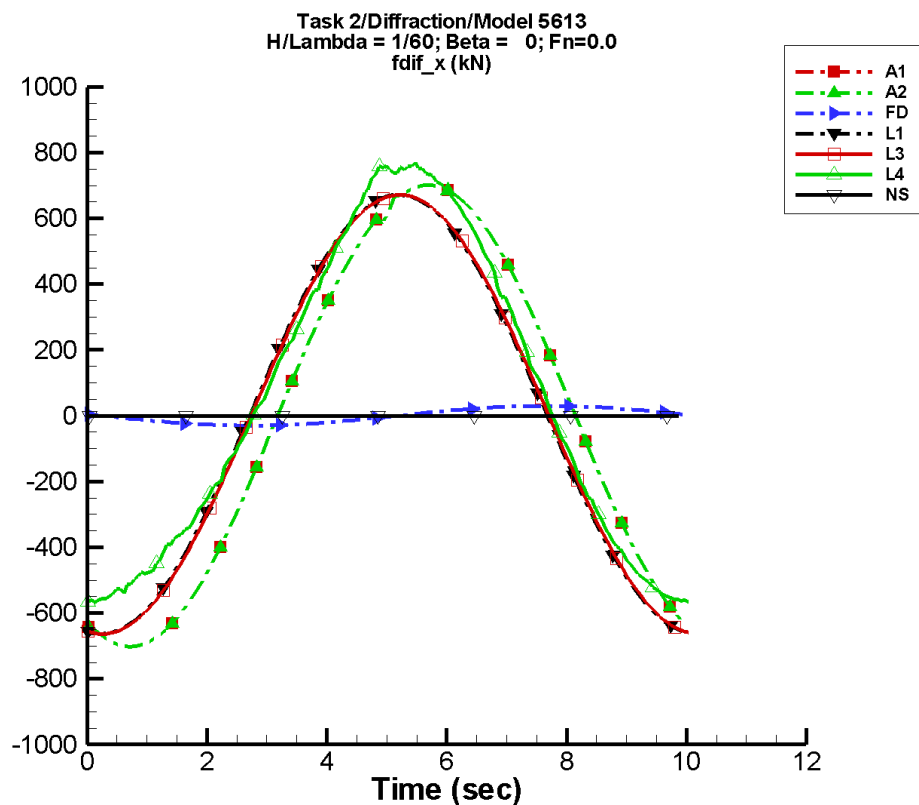
Table G–1675. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	5.91E-04	0.183	-152	9.23E-04	119
A2	5.91E-04	0.183	-152	9.23E-04	119
FD	1.51E-07	1.55E-04	-95	2.25E-07	-132
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	1.67E-04	8.43E-04	154	2.08E-04	-112

Table G–1676. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
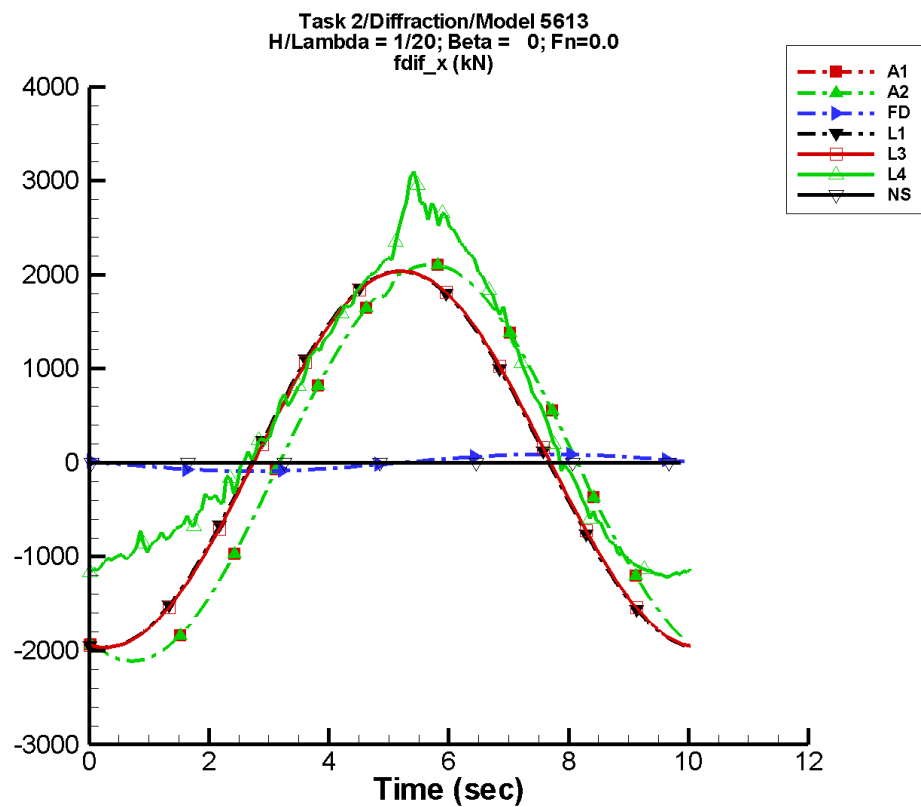
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-0.184	0.183	-0.177	0.177
A2	-0.184	0.183	-0.177	0.177
FD	-1.55E-04	1.55E-04	-1.50E-04	1.50E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.23E-02	1.25E-02	-3.06E-03	2.63E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–839. Time history of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
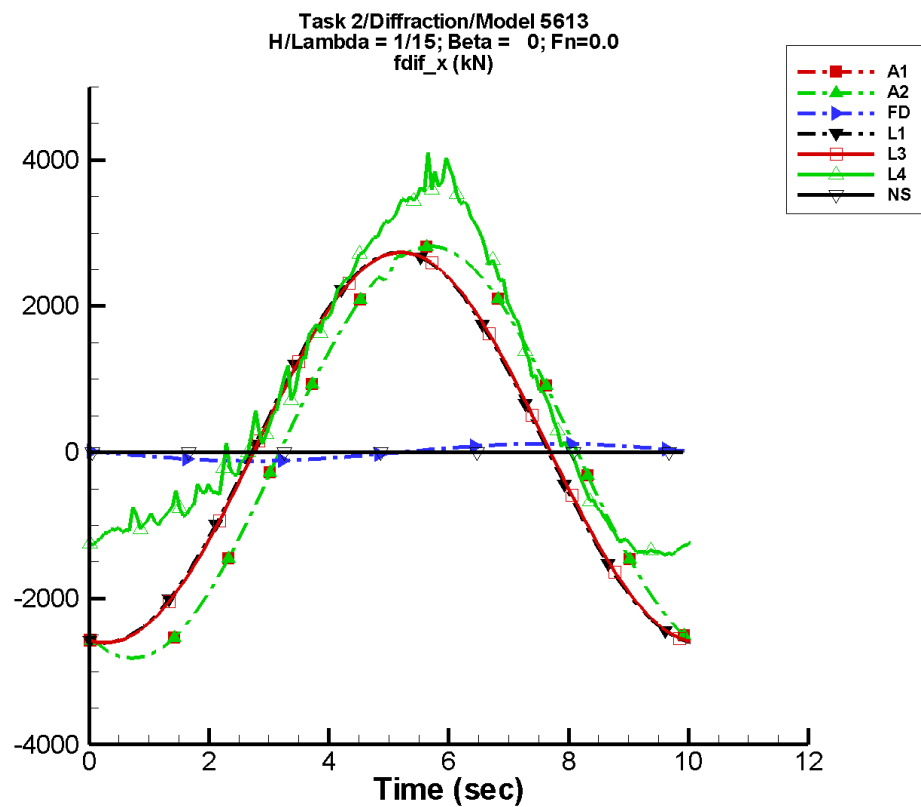
Table G–1677. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	7.89E-04	0.245	-152	1.23E-03	119
A2	7.89E-04	0.245	-152	1.23E-03	119
FD	2.02E-07	2.06E-04	-95	3.00E-07	-132
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	4.46E-04	6.96E-04	14	1.39E-03	-136

Table G–1678. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-0.246	0.244	-0.237	0.237
A2	-0.246	0.244	-0.237	0.237
FD	-2.06E-04	2.06E-04	-2.00E-04	2.00E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-3.63E-02	3.16E-02	-1.86E-03	4.77E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–840. Time history of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
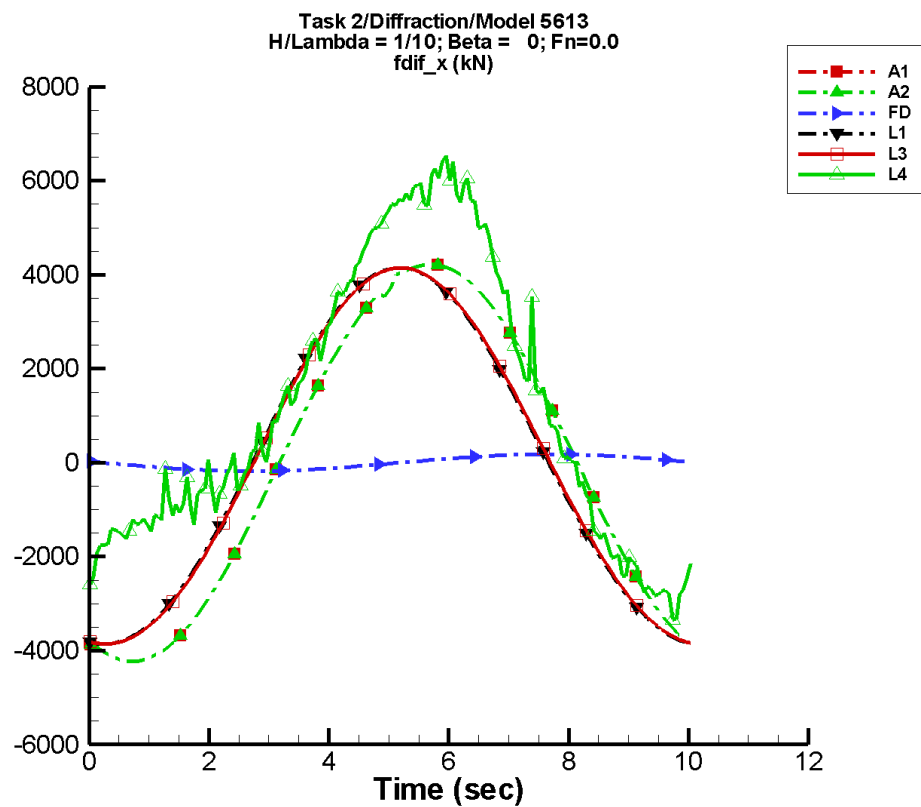
Table G–1679. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	1.18E-03	0.367	-152	1.85E-03	119
A2	1.18E-03	0.367	-152	1.85E-03	119
FD	3.02E-07	3.10E-04	-95	4.50E-07	-132
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1680. Minimum and maximum of of F_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-0.369	0.366	-0.355	0.355
A2	-0.369	0.366	-0.355	0.355
FD	-3.09E-04	3.10E-04	-3.00E-04	3.00E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–841. Time history of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
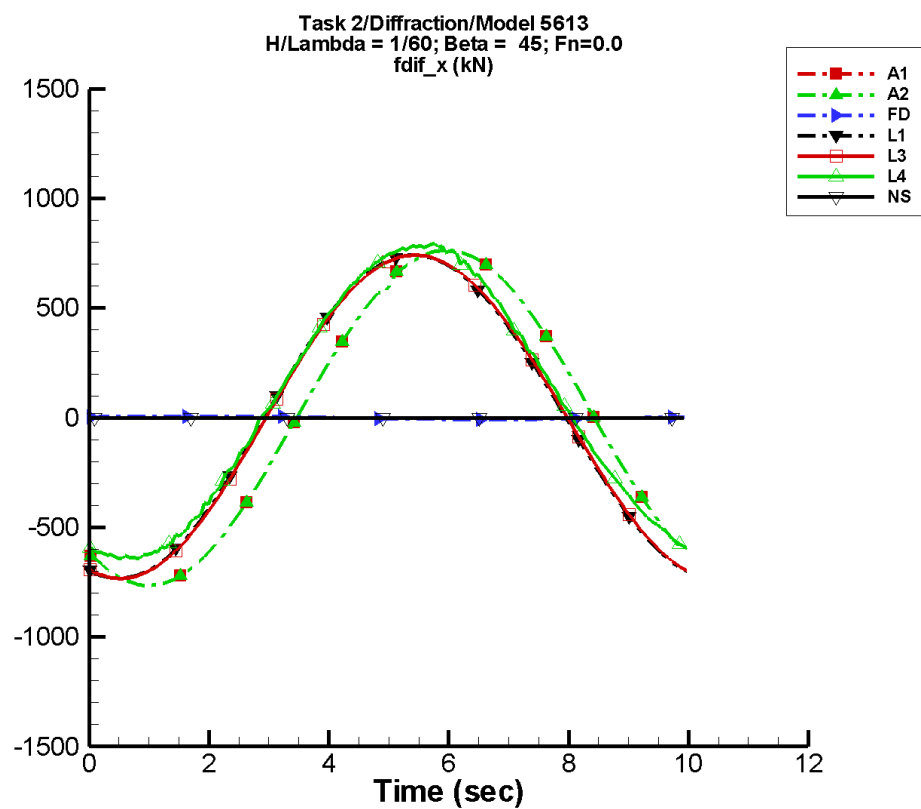
Table G–1681. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-11.6	3.48E+03	152	3.71	115
A2	-11.6	3.48E+03	152	3.71	115
FD	-0.866	2.51E+03	164	1.12	-168
L1	-289.	5.37E+03	117	62.4	-16
L3	-289.	5.37E+03	116	62.5	-16
L4	-383.	5.37E+03	115	248.	18
NF	—	—	—	—	—
NS	-400.	3.18E+03	161	35.6	27

Table G–1682. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
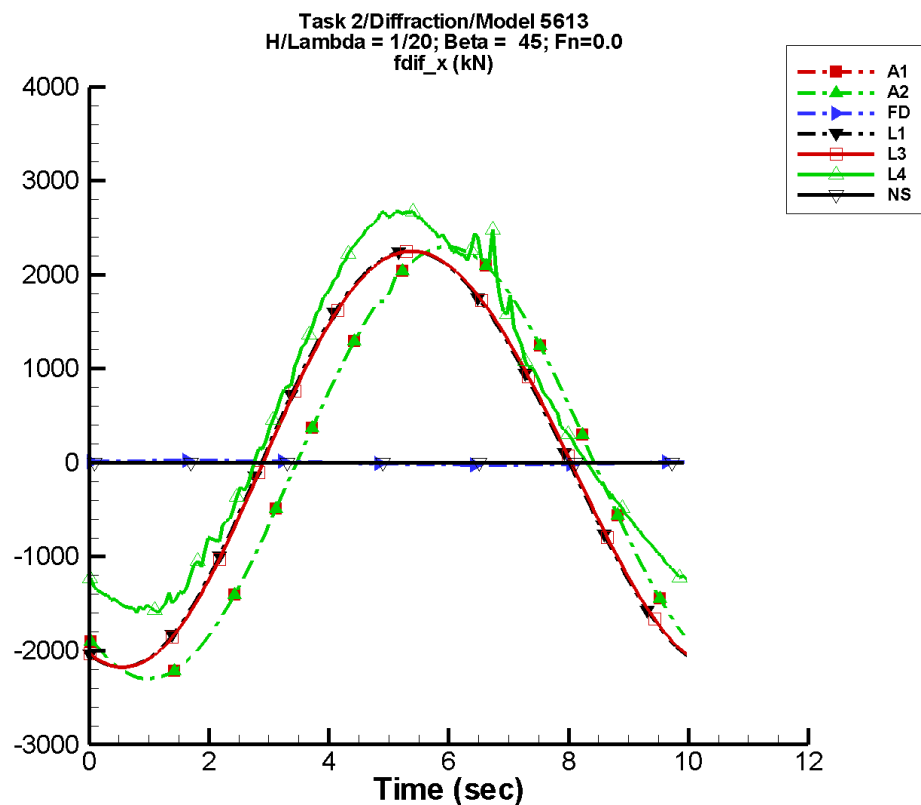
Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-3.47E+03	3.45E+03	-3.44E+03	3.42E+03
A2	-3.47E+03	3.45E+03	-3.44E+03	3.42E+03
FD	-2.51E+03	2.51E+03	-2.48E+03	2.51E+03
L1	-5.72E+03	5.02E+03	-5.70E+03	5.00E+03
L3	-5.71E+03	5.02E+03	-5.69E+03	5.00E+03
L4	-6.08E+03	4.86E+03	-6.03E+03	4.84E+03
NF	—	—	—	—
NS	-3.58E+03	2.73E+03	-3.55E+03	2.69E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–842. Time history of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
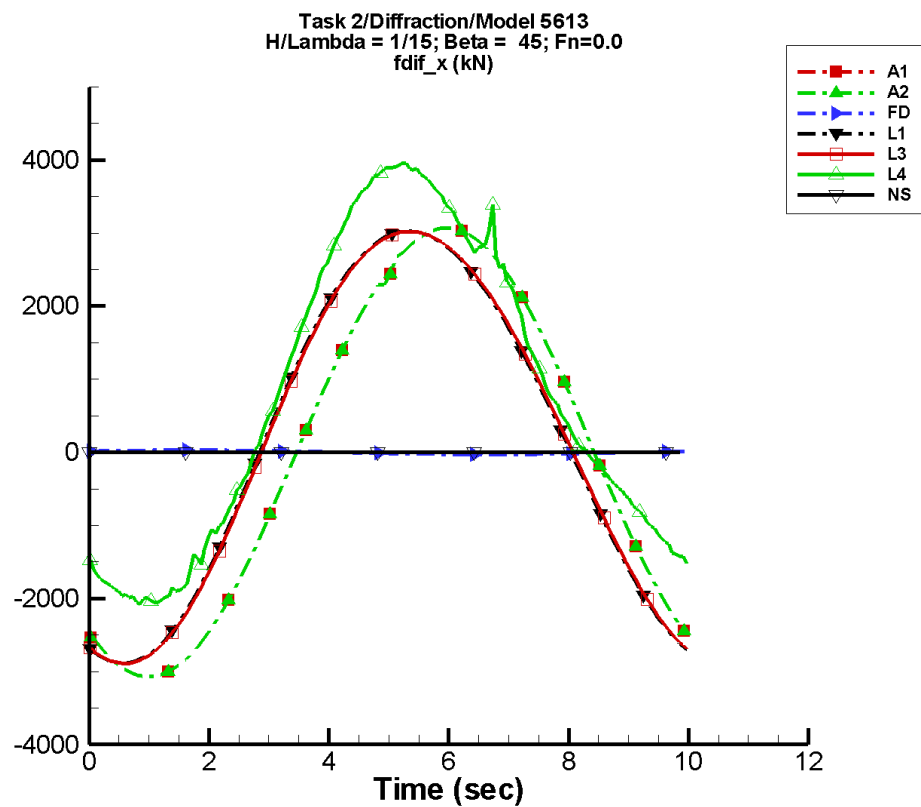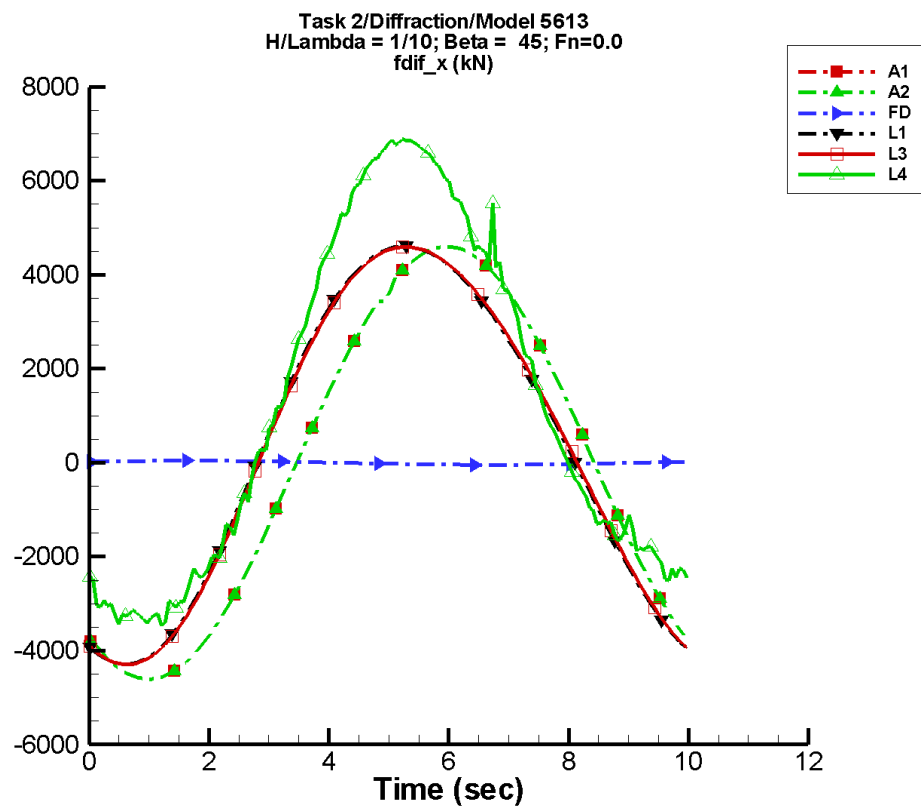
Table G–1683. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-34.9	1.05E+04	152	11.2	115
A2	-34.9	1.05E+04	152	11.2	115
FD	-2.60	7.52E+03	164	3.37	-168
L1	-2.57E+03	1.61E+04	117	585.	-17
L3	-2.57E+03	1.61E+04	116	585.	-17
L4	-3.26E+03	1.48E+04	110	1.21E+03	-9
NF	—	—	—	—	—
NS	-3.60E+03	9.66E+03	156	1.01E+03	-55

Table G–1684. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.05E+04	1.04E+04	-1.03E+04	1.03E+04
A2	-1.05E+04	1.04E+04	-1.03E+04	1.03E+04
FD	-7.52E+03	7.52E+03	-7.44E+03	7.52E+03
L1	-1.92E+04	1.30E+04	-1.92E+04	1.29E+04
L3	-1.92E+04	1.30E+04	-1.92E+04	1.29E+04
L4	-2.02E+04	1.09E+04	-2.01E+04	1.07E+04
NF	—	—	—	—
NS	-1.31E+04	5.99E+03	-1.28E+04	5.68E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 0; Fn=0.0
fdif_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–843. Time history of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
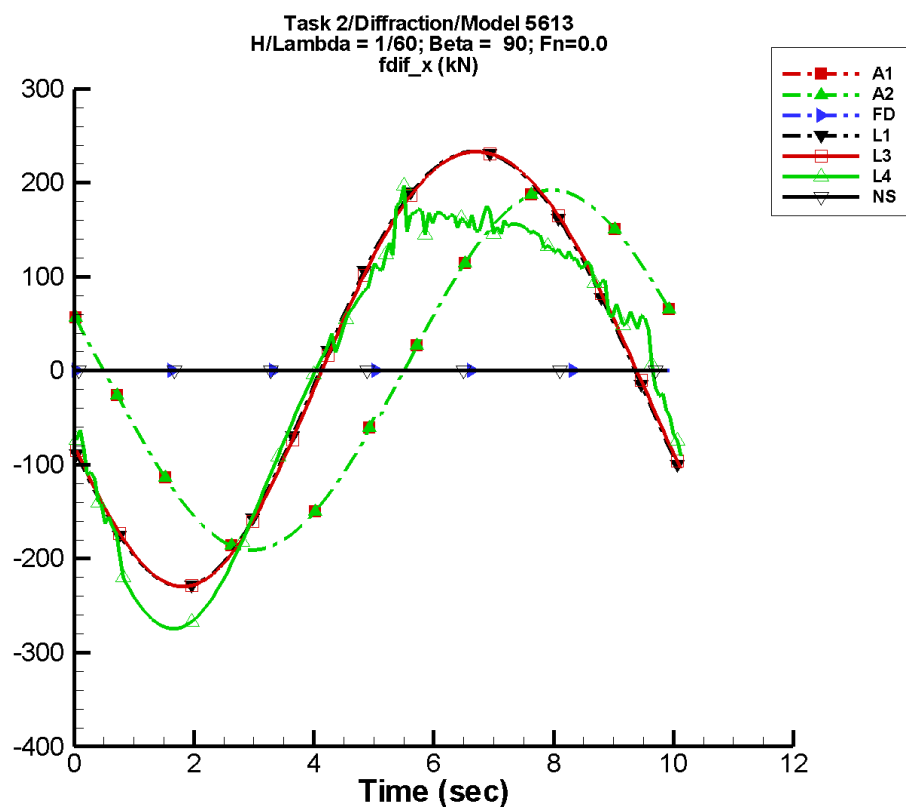
Table G–1685. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-46.6	1.40E+04	152	14.9	115
A2	-46.6	1.40E+04	152	14.9	115
FD	-3.47	1.00E+04	164	4.50	-168
L1	-4.57E+03	2.15E+04	117	1.05E+03	-17
L3	-4.57E+03	2.15E+04	116	1.05E+03	-17
L4	-6.12E+03	1.67E+04	102	1.62E+03	-23
NF	—	—	—	—	—
NS	-5.99E+03	1.26E+04	145	1.13E+03	-100

Table G–1686. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.40E+04	1.39E+04	-1.38E+04	1.37E+04
A2	-1.40E+04	1.39E+04	-1.38E+04	1.37E+04
FD	-1.00E+04	1.00E+04	-9.92E+03	1.00E+04
L1	-2.70E+04	1.59E+04	-2.69E+04	1.59E+04
L3	-2.70E+04	1.60E+04	-2.69E+04	1.59E+04
L4	-2.58E+04	1.01E+04	-2.53E+04	9.03E+03
NF	—	—	—	—
NS	-1.76E+04	6.98E+03	-1.72E+04	6.48E+03

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–844. Time history of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

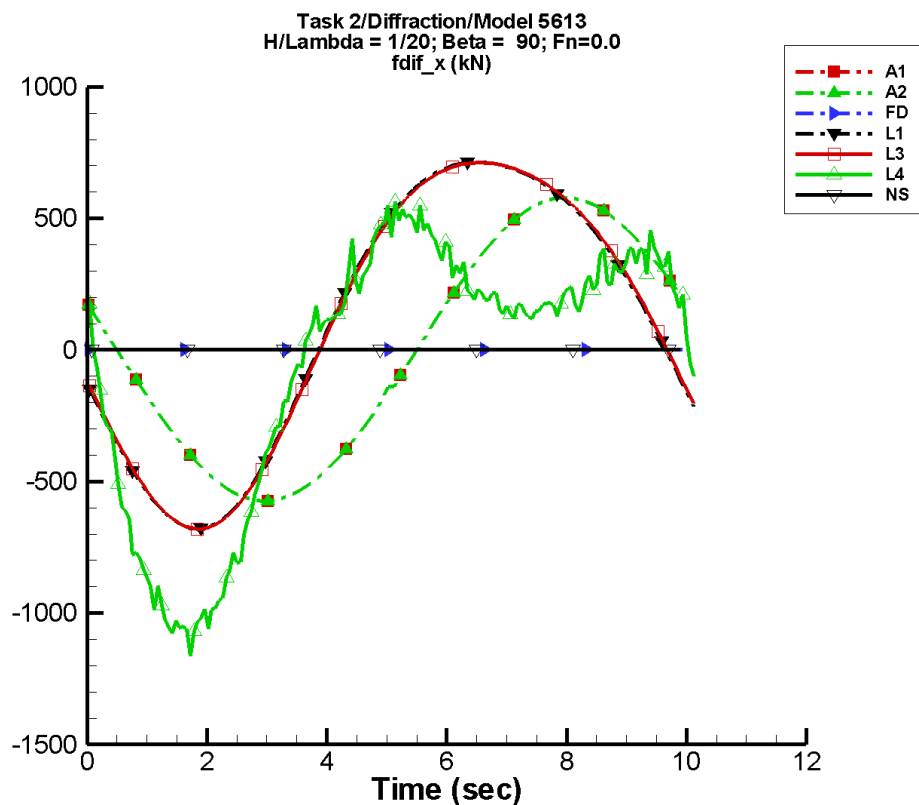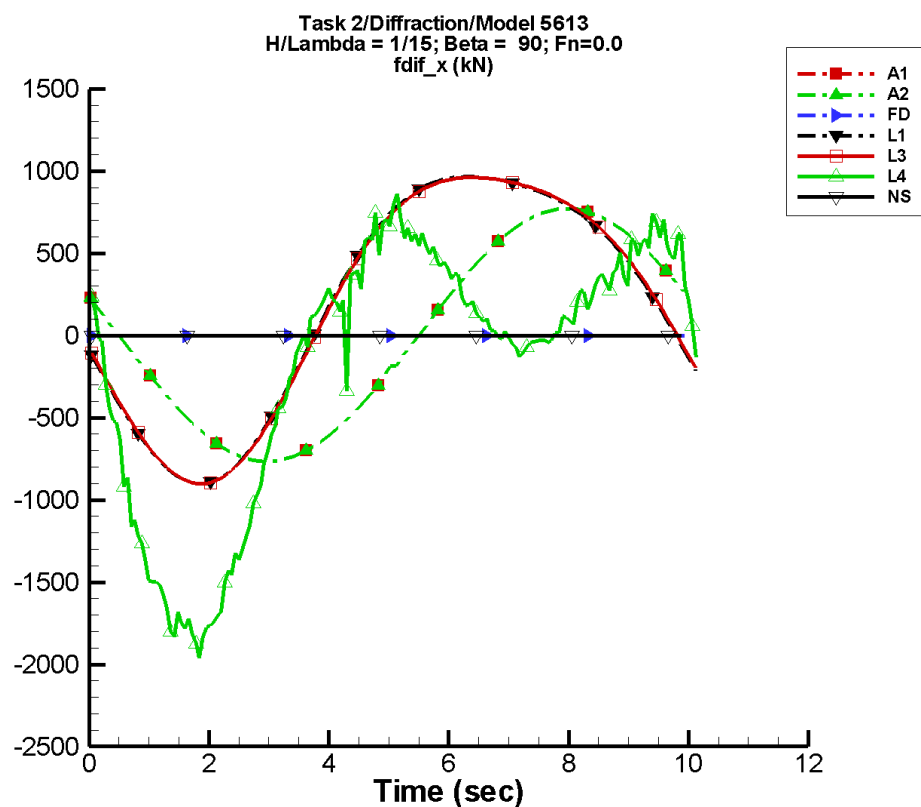Table G–1687. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-69.8	2.10E+04	152	22.4	115
A2	-69.8	2.10E+04	152	22.4	115
FD	-5.20	1.50E+04	164	6.74	-168
L1	-1.03E+04	3.22E+04	117	2.36E+03	-17
L3	-1.03E+04	3.22E+04	116	2.36E+03	-17
L4	-1.14E+04	1.36E+04	92	3.78E+03	-22
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1688. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.09E+04	2.08E+04	-2.07E+04	2.06E+04
A2	-2.09E+04	2.08E+04	-2.07E+04	2.06E+04
FD	-1.50E+04	1.50E+04	-1.49E+04	1.50E+04
L1	-4.47E+04	1.98E+04	-4.46E+04	1.97E+04
L3	-4.47E+04	1.98E+04	-4.45E+04	1.97E+04
L4	-3.14E+04	5.98E+03	-2.91E+04	3.81E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–845. Time history of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1689. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-16.1	6.50E+03	141	9.60	77
A2	-16.1	6.50E+03	141	9.60	77
FD	-2.31	5.49E+03	146	2.55	176
L1	-518.	9.58E+03	116	89.4	14
L3	-518.	9.57E+03	115	89.4	14
L4	-607.	9.32E+03	113	260.	-115
NF	—	—	—	—	—
NS	-488.	5.88E+03	148	62.7	-90

Table G–1690. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-6.51E+03	6.48E+03	-6.45E+03	6.41E+03
A2	-6.51E+03	6.48E+03	-6.45E+03	6.41E+03
FD	-5.50E+03	5.49E+03	-5.44E+03	5.44E+03
L1	-1.02E+04	9.00E+03	-1.01E+04	8.97E+03
L3	-1.01E+04	9.00E+03	-1.01E+04	8.97E+03
L4	-1.01E+04	8.68E+03	-1.00E+04	8.64E+03
NF	—	—	—	—
NS	-6.28E+03	5.39E+03	-6.21E+03	5.32E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–846. Time history of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
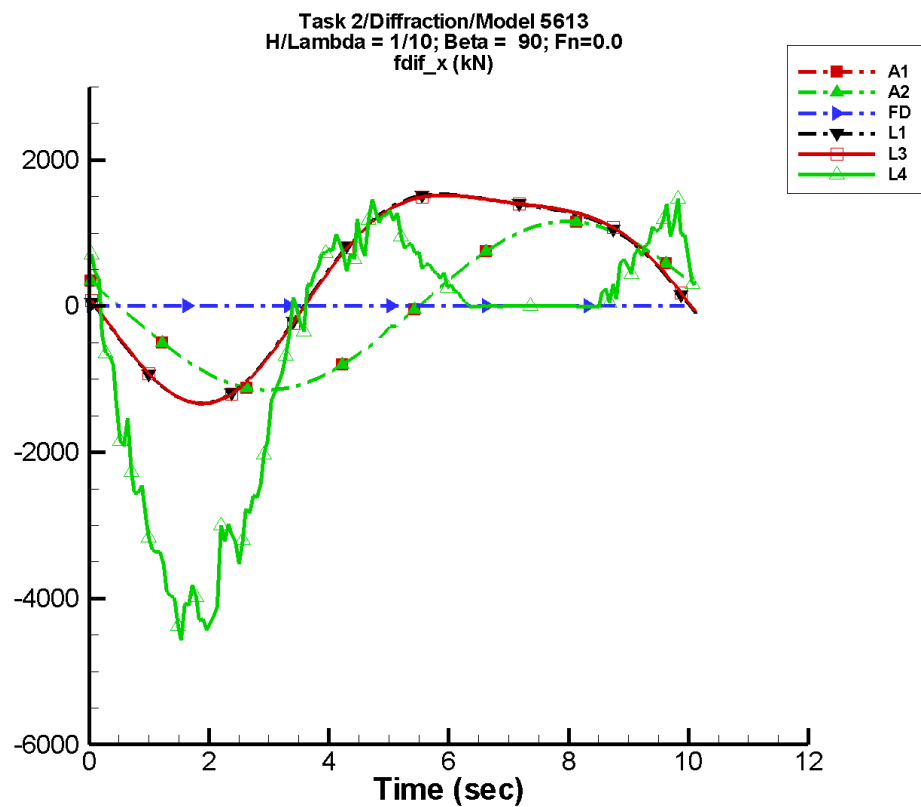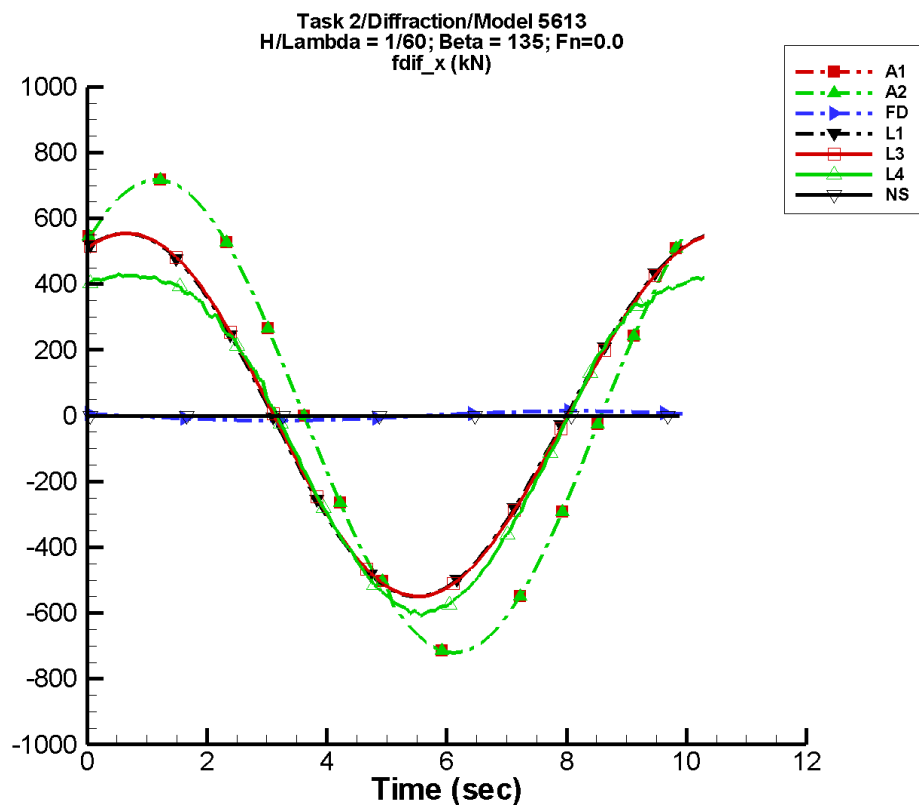
Table G–1691. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-48.3	1.96E+04	141	28.9	77
A2	-48.3	1.96E+04	141	28.9	77
FD	-6.94	1.65E+04	146	7.64	176
L1	-4.63E+03	2.87E+04	116	854.	13
L3	-4.63E+03	2.87E+04	115	855.	13
L4	-5.06E+03	2.53E+04	108	1.74E+03	-139
NF	—	—	—	—	—
NS	-4.12E+03	1.71E+04	145	1.37E+03	-120

Table G–1692. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
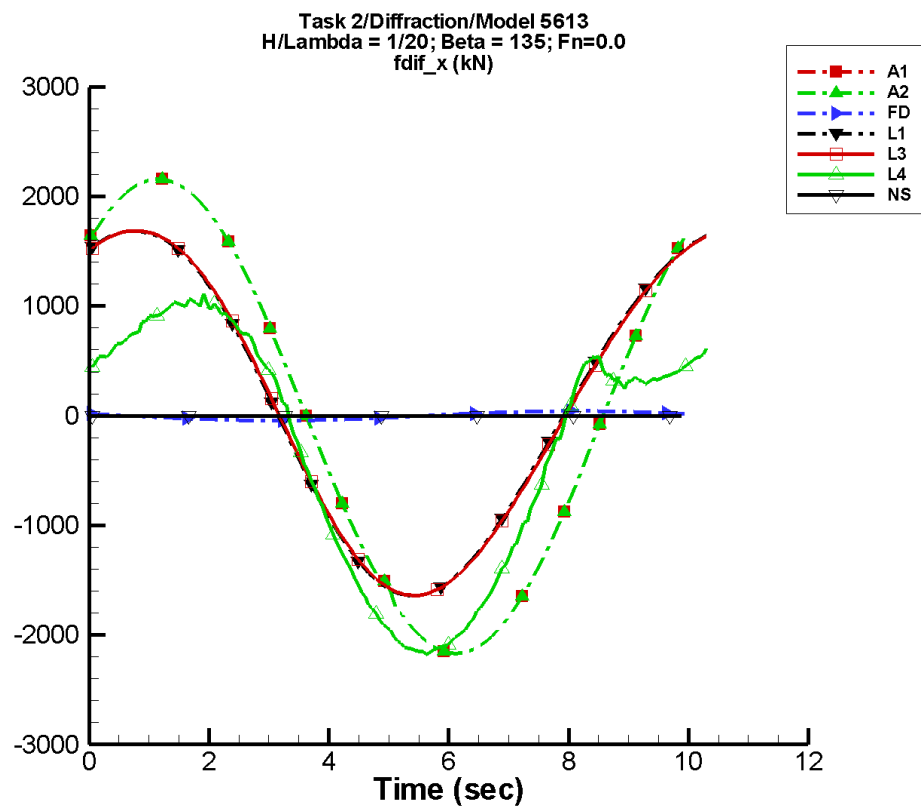
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.96E+04	1.95E+04	-1.94E+04	1.93E+04
A2	-1.96E+04	1.95E+04	-1.94E+04	1.93E+04
FD	-1.65E+04	1.65E+04	-1.63E+04	1.63E+04
L1	-3.39E+04	2.36E+04	-3.38E+04	2.35E+04
L3	-3.39E+04	2.36E+04	-3.38E+04	2.35E+04
L4	-3.05E+04	2.01E+04	-3.02E+04	1.99E+04
NF	—	—	—	—
NS	-1.97E+04	1.38E+04	-1.93E+04	1.33E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 45; Fn=0.0
fdif_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–847. Time history of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
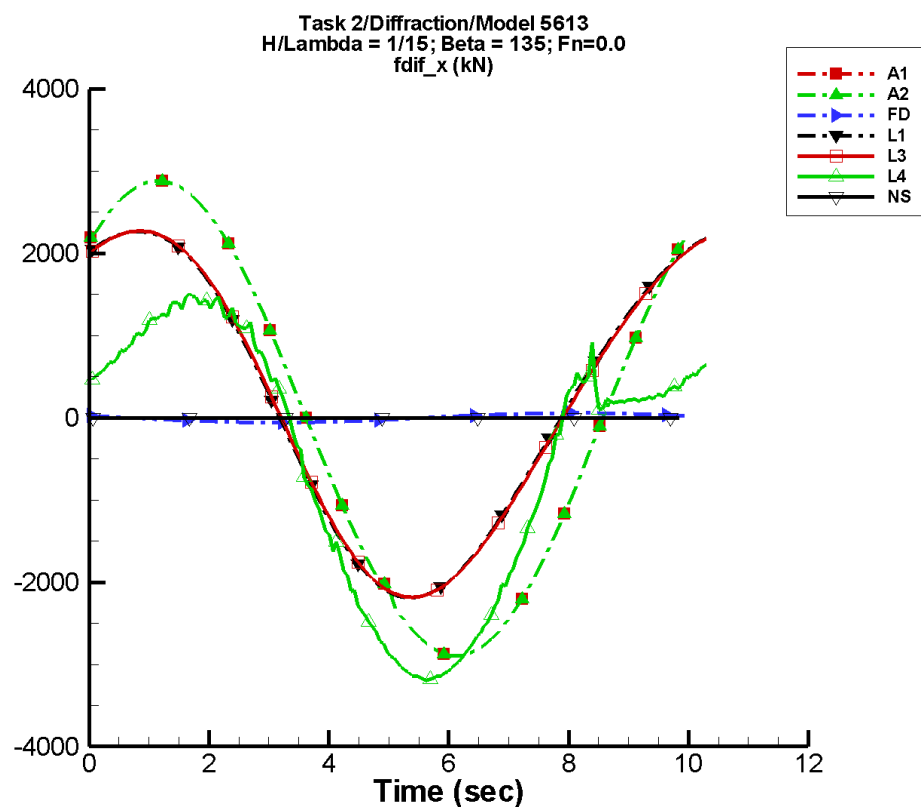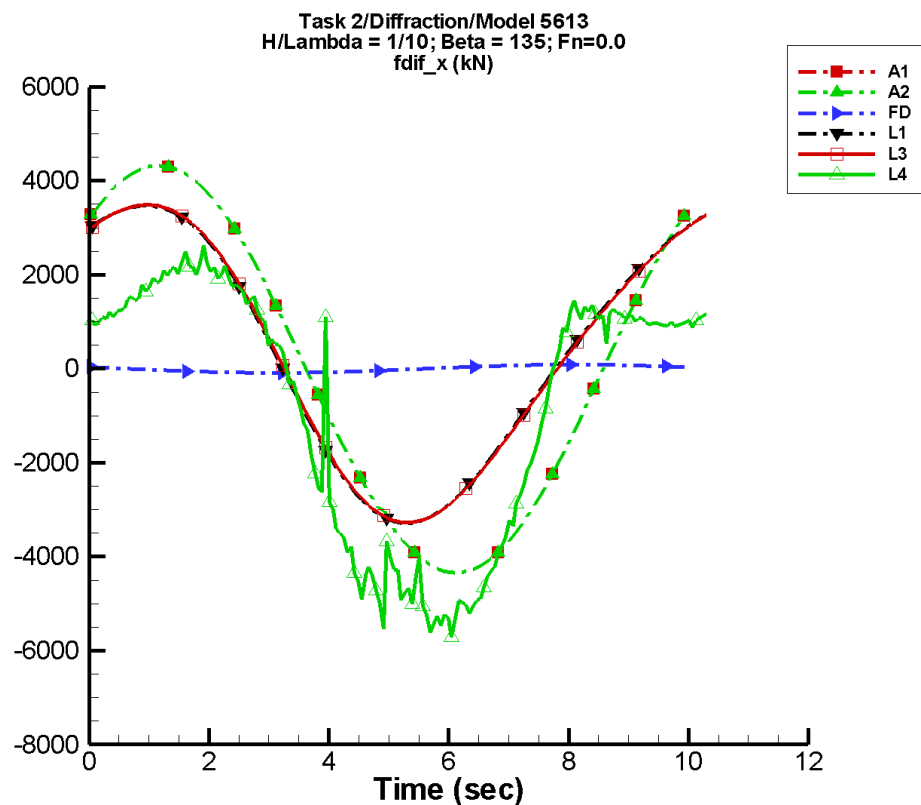
Table G–1693. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-64.5	2.61E+04	141	38.5	77
A2	-64.5	2.61E+04	141	38.5	77
FD	-9.25	2.20E+04	146	10.2	176
L1	-8.22E+03	3.83E+04	116	1.53E+03	13
L3	-8.22E+03	3.83E+04	115	1.53E+03	13
L4	-8.71E+03	2.98E+04	101	1.86E+03	-141
NF	—	—	—	—	—
NS	-6.69E+03	2.15E+04	137	1.75E+03	-144

Table G–1694. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.62E+04	2.60E+04	-2.59E+04	2.57E+04
A2	-2.62E+04	2.60E+04	-2.59E+04	2.57E+04
FD	-2.20E+04	2.20E+04	-2.18E+04	2.18E+04
L1	-4.76E+04	2.92E+04	-4.74E+04	2.91E+04
L3	-4.75E+04	2.93E+04	-4.73E+04	2.91E+04
L4	-3.90E+04	2.10E+04	-3.88E+04	2.05E+04
NF	—	—	—	—
NS	-2.63E+04	1.75E+04	-2.59E+04	1.56E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–848. Time history of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
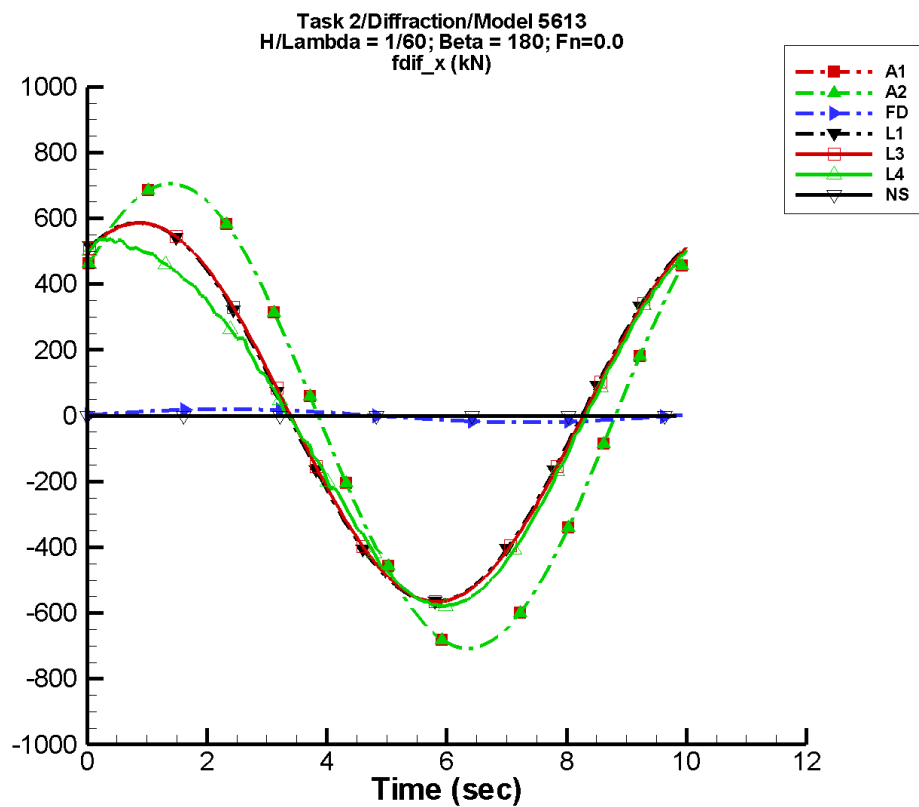
Table G–1695. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-96.8	3.92E+04	141	57.8	77
A2	-96.8	3.92E+04	141	57.8	77
FD	-13.9	3.30E+04	146	15.3	176
L1	-1.85E+04	5.75E+04	116	3.47E+03	13
L3	-1.85E+04	5.74E+04	115	3.47E+03	13
L4	-1.52E+04	3.27E+04	96	2.51E+03	-45
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1696. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-3.92E+04	3.90E+04	-3.88E+04	3.86E+04
A2	-3.92E+04	3.90E+04	-3.88E+04	3.86E+04
FD	-3.30E+04	3.30E+04	-3.26E+04	3.26E+04
L1	-7.83E+04	3.71E+04	-7.81E+04	3.69E+04
L3	-7.82E+04	3.72E+04	-7.80E+04	3.70E+04
L4	-5.21E+04	2.50E+04	-5.09E+04	2.05E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–849. Time history of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1697. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
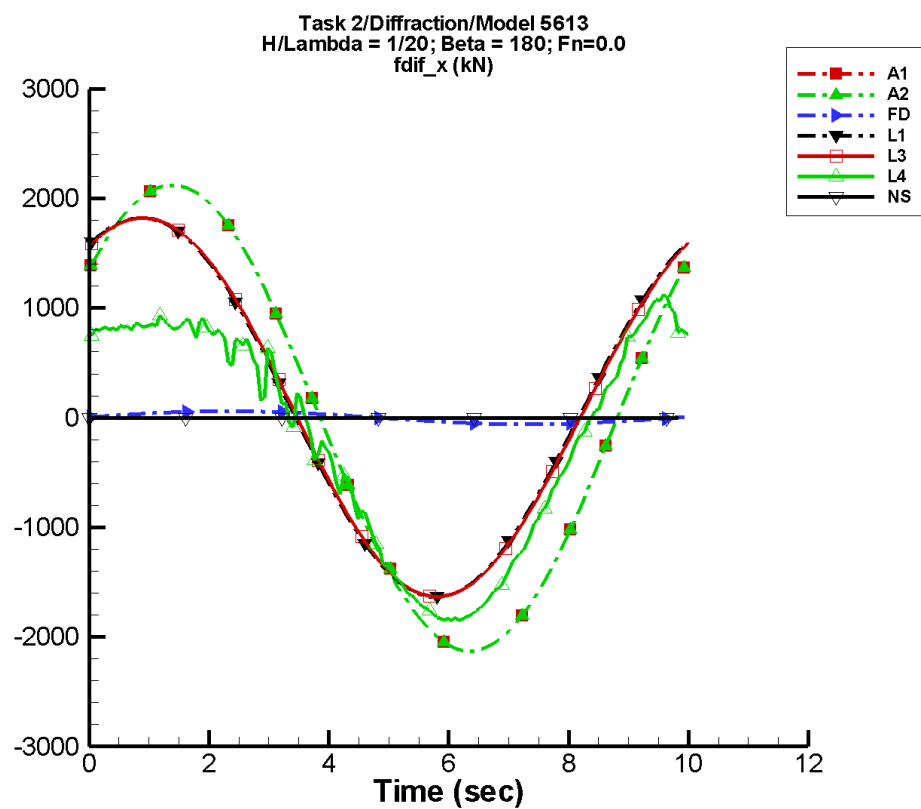
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-15.7	1.14E+04	122	25.3	50
A2	-15.7	1.14E+04	122	25.3	50
FD	-4.66	1.01E+04	121	4.77	153
L1	-850.	1.71E+04	109	597.	60
L3	-850.	1.71E+04	108	597.	60
L4	-896.	1.64E+04	106	452.	127
NF	—	—	—	—	—
NS	-588.	9.96E+03	132	48.4	-77

Table G–1698. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.14E+04	1.14E+04	-1.13E+04	1.12E+04
A2	-1.14E+04	1.14E+04	-1.13E+04	1.12E+04
FD	-1.01E+04	1.01E+04	-9.99E+03	9.99E+03
L1	-1.78E+04	1.65E+04	-1.77E+04	1.65E+04
L3	-1.78E+04	1.65E+04	-1.77E+04	1.65E+04
L4	-1.78E+04	1.66E+04	-1.74E+04	1.64E+04
NF	—	—	—	—
NS	-1.06E+04	9.50E+03	-1.05E+04	9.33E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–850. Time history of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
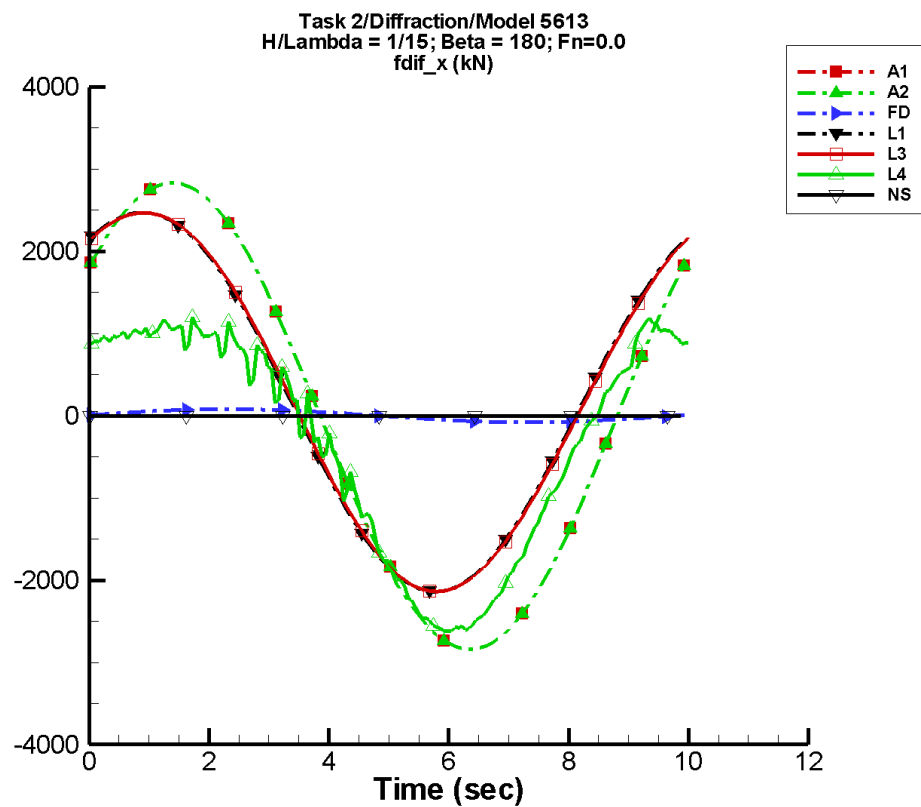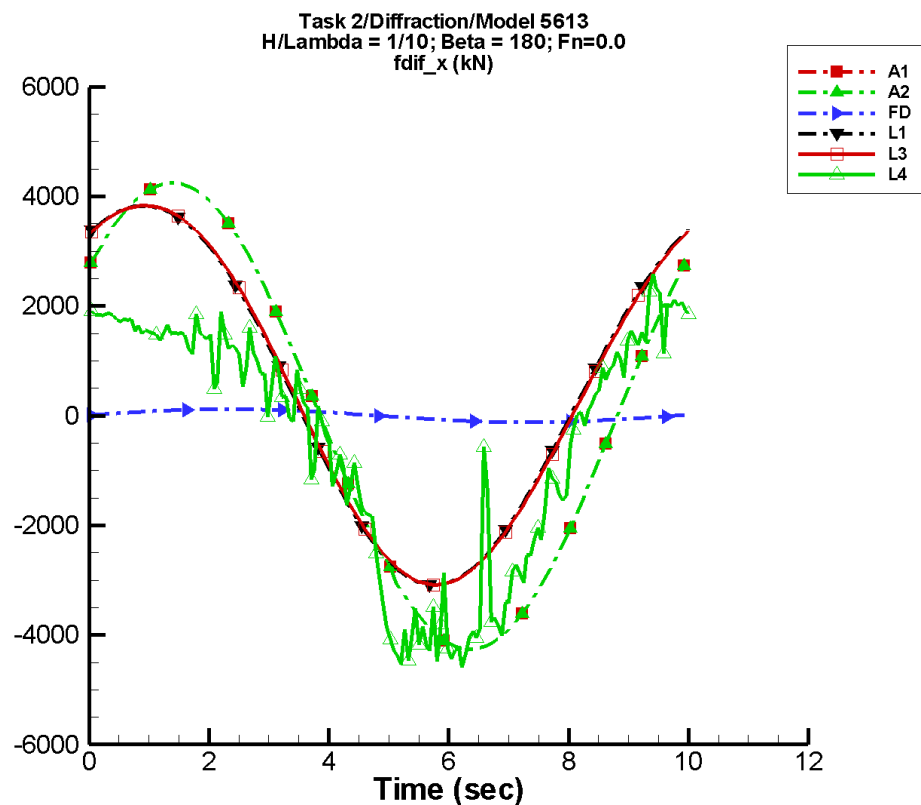
Table G–1699. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-47.4	3.43E+04	122	76.0	50
A2	-47.4	3.43E+04	122	76.0	50
FD	-14.0	3.03E+04	121	14.3	153
L1	-7.64E+03	5.13E+04	109	5.37E+03	60
L3	-7.64E+03	5.13E+04	108	5.37E+03	60
L4	-7.26E+03	4.50E+04	102	3.15E+03	118
NF	—	—	—	—	—
NS	-4.69E+03	2.81E+04	131	826.	31

Table G–1700. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-3.43E+04	3.41E+04	-3.40E+04	3.38E+04
A2	-3.43E+04	3.41E+04	-3.40E+04	3.38E+04
FD	-3.03E+04	3.03E+04	-3.00E+04	3.00E+04
L1	-5.80E+04	4.66E+04	-5.79E+04	4.63E+04
L3	-5.78E+04	4.67E+04	-5.76E+04	4.65E+04
L4	-5.41E+04	4.51E+04	-5.36E+04	4.46E+04
NF	—	—	—	—
NS	-3.56E+04	2.70E+04	-3.43E+04	2.46E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–851. Time history of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
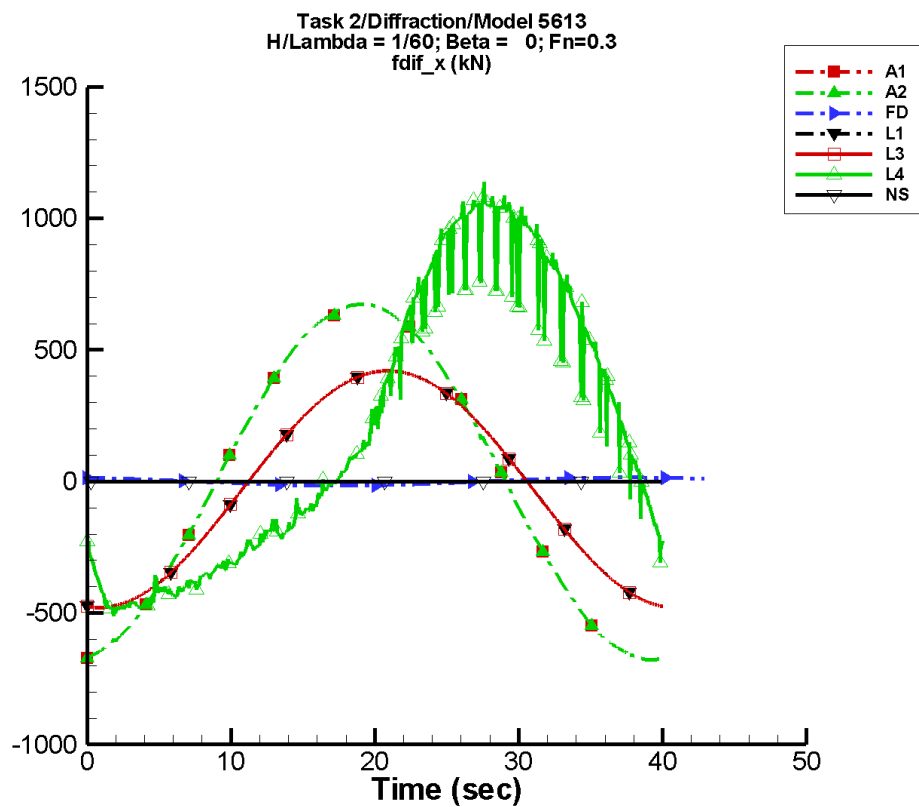
Table G–1701. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-63.2	4.58E+04	122	101.	50
A2	-63.2	4.58E+04	122	101.	50
FD	-18.7	4.04E+04	121	19.1	153
L1	-1.36E+04	6.85E+04	109	9.55E+03	60
L3	-1.36E+04	6.84E+04	108	9.55E+03	60
L4	-1.13E+04	5.59E+04	98	5.12E+03	107
NF	—	—	—	—	—
NS	-7.45E+03	3.41E+04	130	1.43E+03	50

Table G–1702. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-4.58E+04	4.56E+04	-4.53E+04	4.51E+04
A2	-4.58E+04	4.56E+04	-4.53E+04	4.51E+04
FD	-4.04E+04	4.04E+04	-4.00E+04	4.00E+04
L1	-8.10E+04	6.03E+04	-8.08E+04	6.00E+04
L3	-8.06E+04	6.06E+04	-8.04E+04	6.02E+04
L4	-7.13E+04	5.87E+04	-7.03E+04	5.79E+04
NF	—	—	—	—
NS	-4.55E+04	3.89E+04	-4.47E+04	3.16E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–852. Time history of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

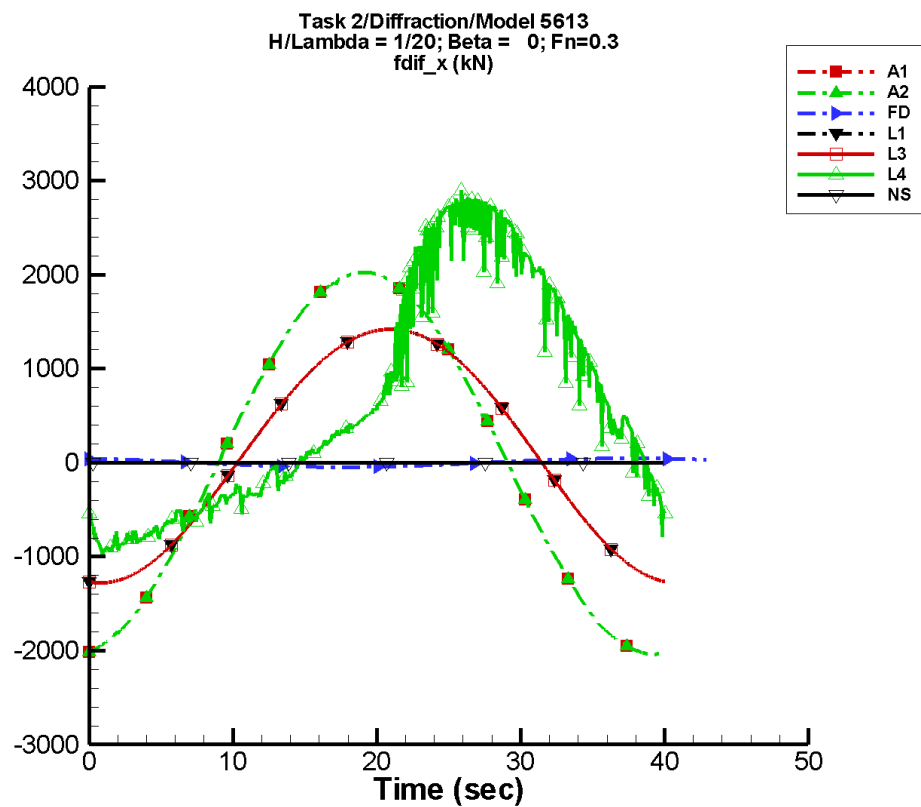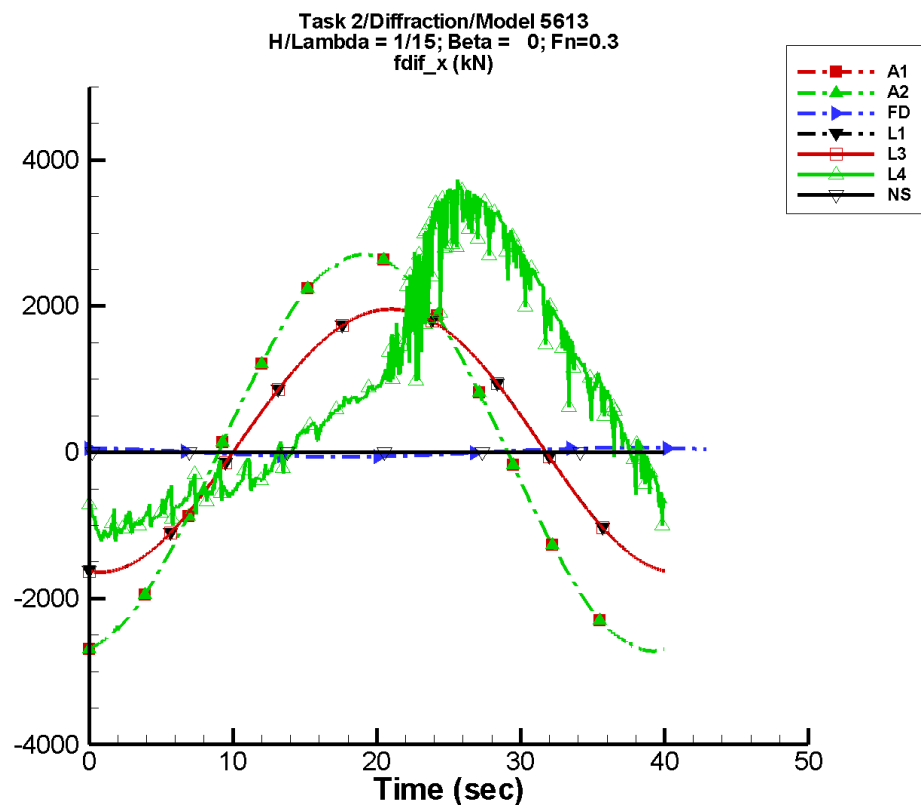Table G–1703. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-94.8	6.87E+04	122	152.	50
A2	-94.8	6.87E+04	122	152.	50
FD	-28.0	6.05E+04	121	28.6	153
L1	-3.06E+04	1.03E+05	109	2.15E+04	60
L3	-3.06E+04	1.03E+05	108	2.15E+04	60
L4	-1.54E+04	6.64E+04	97	7.87E+03	-13
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1704. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-6.87E+04	6.84E+04	-6.80E+04	6.77E+04
A2	-6.87E+04	6.84E+04	-6.80E+04	6.77E+04
FD	-6.05E+04	6.05E+04	-5.99E+04	5.99E+04
L1	-1.34E+05	8.57E+04	-1.33E+05	8.51E+04
L3	-1.33E+05	8.61E+04	-1.33E+05	8.55E+04
L4	-1.06E+05	8.42E+04	-1.04E+05	8.15E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–853. Time history of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
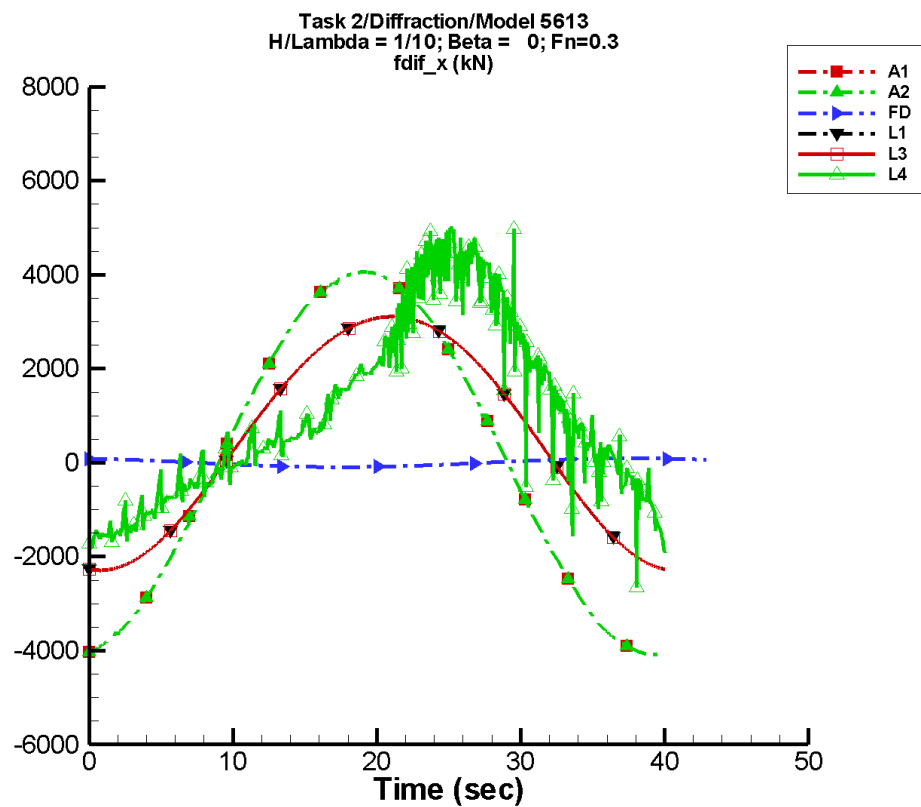
Table G–1705. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-11.6	7.54E+03	104	21.0	32
A2	-11.6	7.54E+03	104	21.0	32
FD	-2.46	5.89E+03	97	2.73	132
L1	-576.	1.25E+04	100	94.3	28
L3	-577.	1.25E+04	99	94.6	28
L4	-746.	1.18E+04	99	477.	-173
NF	—	—	—	—	—
NS	-473.	6.06E+03	117	78.2	-132

Table G–1706. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-7.52E+03	7.49E+03	-7.43E+03	7.41E+03
A2	-7.52E+03	7.49E+03	-7.43E+03	7.41E+03
FD	-5.89E+03	5.89E+03	-5.83E+03	5.83E+03
L1	-1.31E+04	1.19E+04	-1.30E+04	1.19E+04
L3	-1.31E+04	1.19E+04	-1.30E+04	1.19E+04
L4	-1.26E+04	1.13E+04	-1.24E+04	1.12E+04
NF	—	—	—	—
NS	-6.52E+03	5.60E+03	-6.42E+03	5.53E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–854. Time history of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
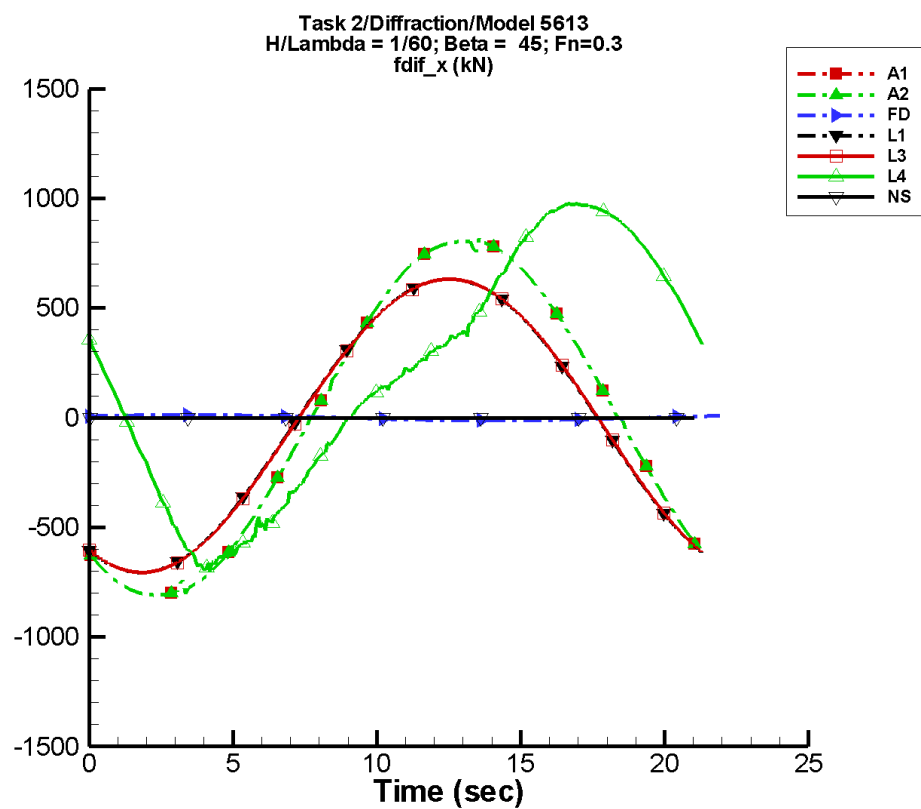
Table G–1707. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-35.0	2.27E+04	104	63.0	32
A2	-35.0	2.27E+04	104	63.0	32
FD	-7.39	1.77E+04	97	8.18	132
L1	-5.11E+03	3.75E+04	100	843.	25
L3	-5.11E+03	3.75E+04	99	844.	25
L4	-6.62E+03	3.03E+04	96	2.76E+03	-159
NF	—	—	—	—	—
NS	-4.05E+03	1.64E+04	118	1.51E+03	-121

Table G–1708. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
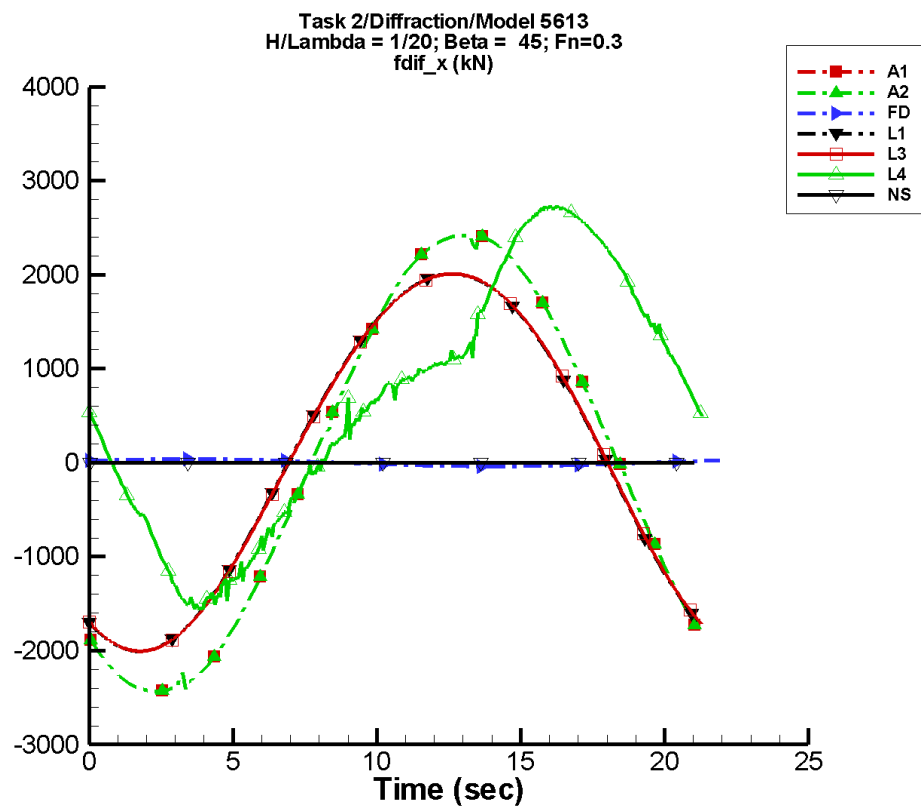
Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.26E+04	2.25E+04	-2.24E+04	2.23E+04
A2	-2.26E+04	2.25E+04	-2.24E+04	2.23E+04
FD	-1.77E+04	1.77E+04	-1.75E+04	1.75E+04
L1	-4.26E+04	3.25E+04	-4.24E+04	3.24E+04
L3	-4.25E+04	3.25E+04	-4.24E+04	3.24E+04
L4	-3.75E+04	2.28E+04	-3.72E+04	2.26E+04
NF	—	—	—	—
NS	-2.07E+04	1.39E+04	-2.02E+04	1.33E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–855. Time history of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
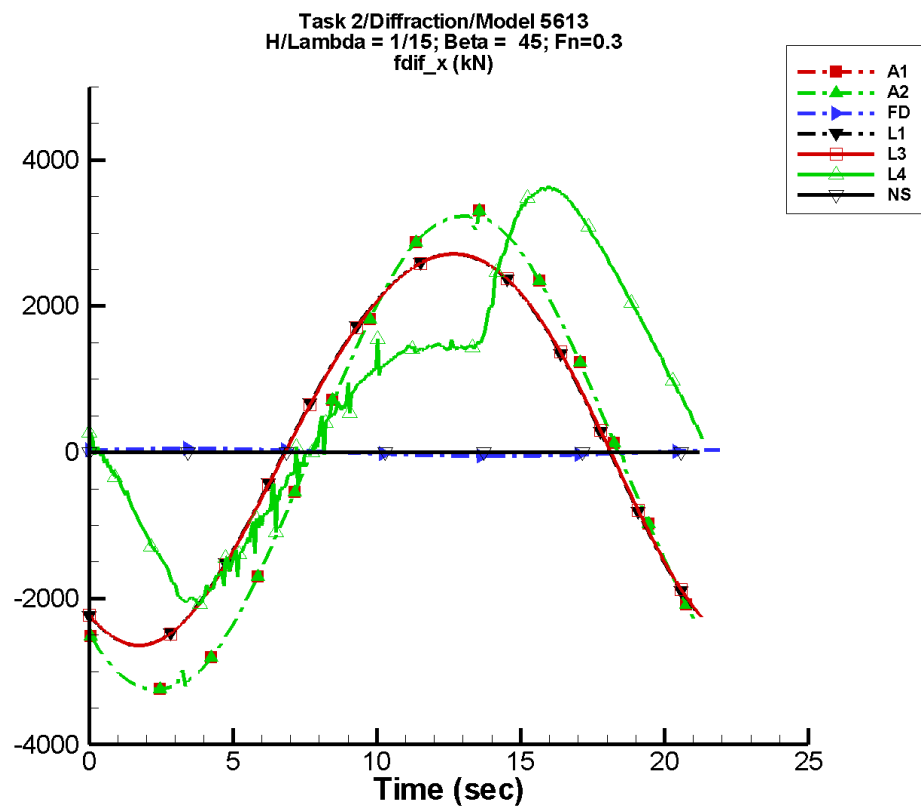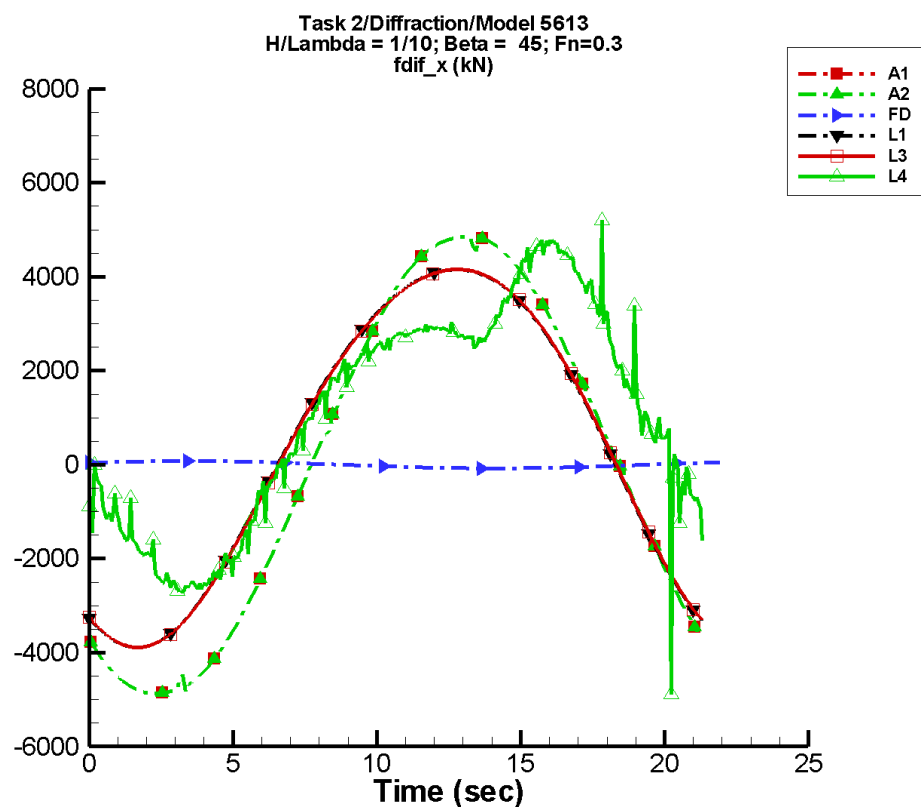
Table G–1709. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-46.8	3.03E+04	104	84.2	32
A2	-46.8	3.03E+04	104	84.2	32
FD	-9.85	2.35E+04	97	10.9	132
L1	-9.06E+03	5.00E+04	100	1.50E+03	24
L3	-9.06E+03	5.00E+04	99	1.50E+03	24
L4	-1.14E+04	3.58E+04	90	2.57E+03	-157
NF	—	—	—	—	—
NS	-6.62E+03	2.04E+04	121	1.57E+03	-98

Table G–1710. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-3.02E+04	3.01E+04	-2.98E+04	2.97E+04
A2	-3.02E+04	3.01E+04	-2.98E+04	2.97E+04
FD	-2.35E+04	2.35E+04	-2.33E+04	2.33E+04
L1	-5.90E+04	4.11E+04	-5.88E+04	4.09E+04
L3	-5.90E+04	4.12E+04	-5.88E+04	4.10E+04
L4	-4.79E+04	2.39E+04	-4.76E+04	2.32E+04
NF	—	—	—	—
NS	-2.70E+04	1.50E+04	-2.67E+04	1.43E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–856. Time history of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
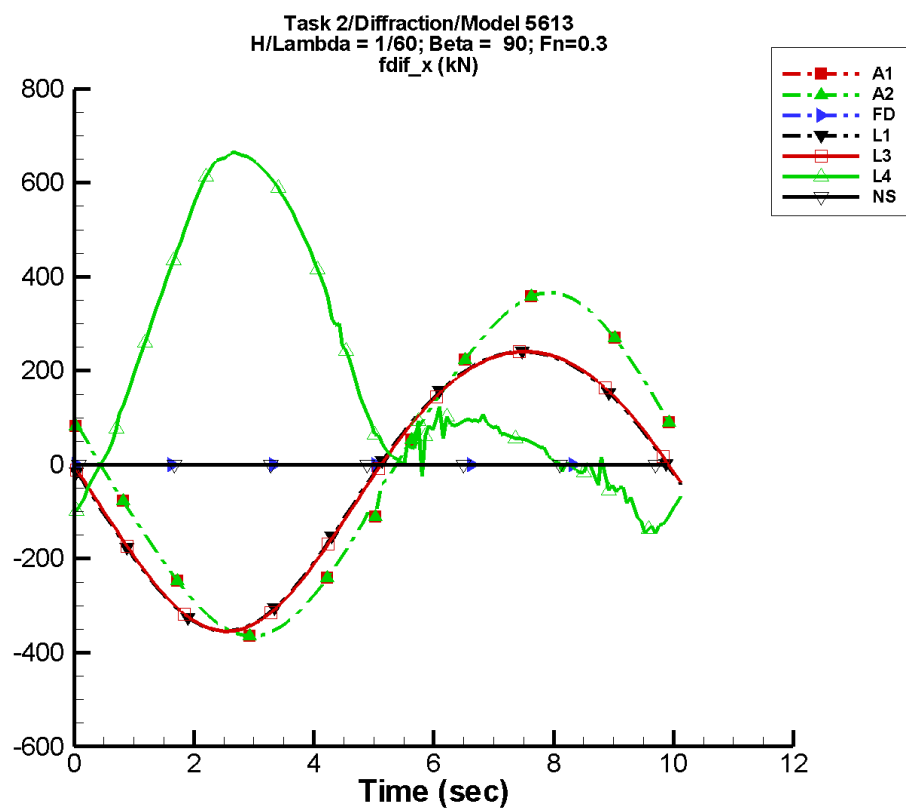
Table G–1711. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-70.1	4.54E+04	104	126.	32
A2	-70.1	4.54E+04	104	126.	32
FD	-14.8	3.53E+04	97	16.4	132
L1	-2.04E+04	7.49E+04	100	3.37E+03	24
L3	-2.04E+04	7.49E+04	99	3.37E+03	24
L4	-1.76E+04	3.81E+04	86	2.06E+03	109
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1712. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-4.53E+04	4.51E+04	-4.48E+04	4.46E+04
A2	-4.53E+04	4.51E+04	-4.48E+04	4.46E+04
FD	-3.53E+04	3.53E+04	-3.50E+04	3.50E+04
L1	-9.54E+04	5.51E+04	-9.51E+04	5.49E+04
L3	-9.53E+04	5.53E+04	-9.50E+04	5.50E+04
L4	-6.89E+04	2.46E+04	-5.24E+04	2.25E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–857. Time history of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1713. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
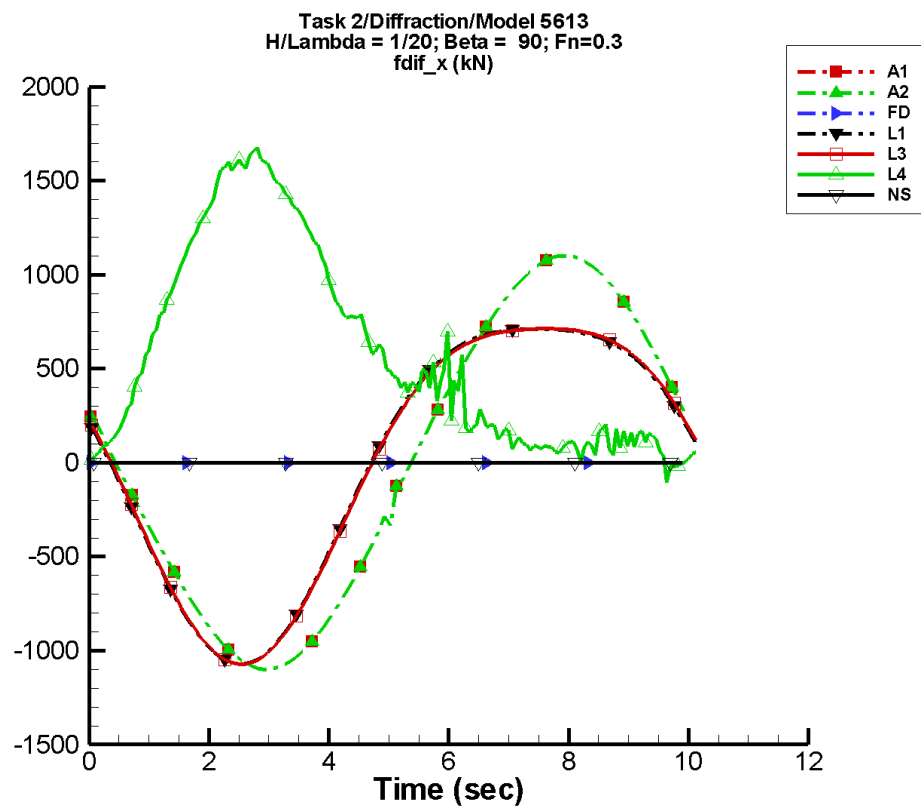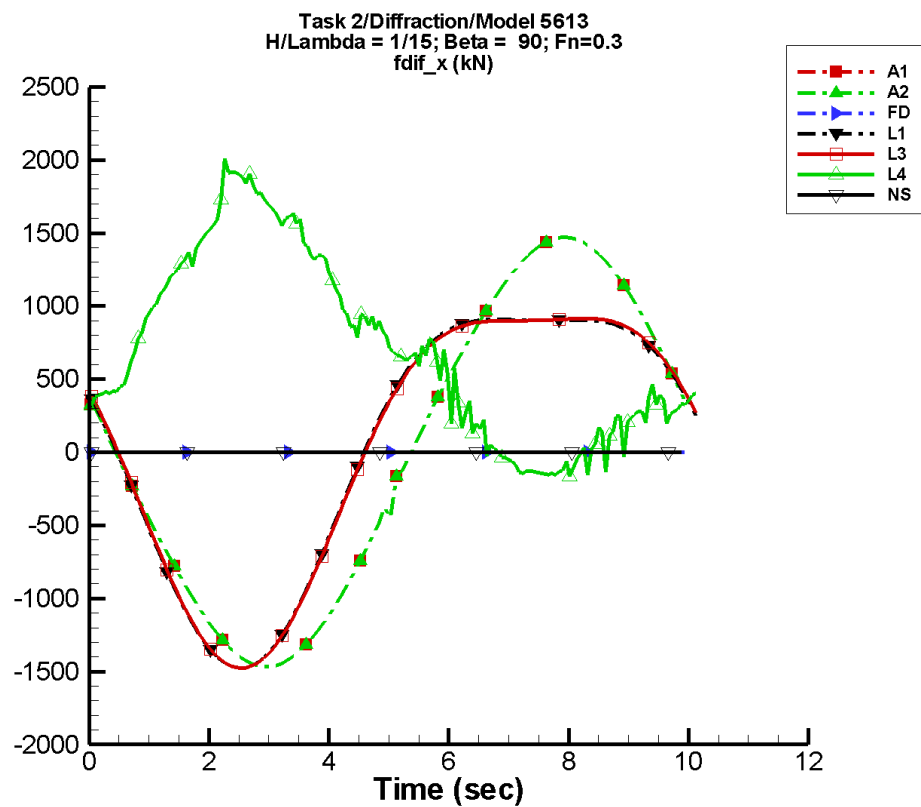
Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-11.1	4.46E+03	94	14.2	23
A2	-11.1	4.46E+03	94	14.2	23
FD	-0.985	2.82E+03	81	1.27	117
L1	-320.	8.05E+03	96	27.1	12
L3	-320.	8.05E+03	95	27.2	13
L4	-496.	7.68E+03	97	352.	129
NF	—	—	—	—	—
NS	-389.	3.32E+03	108	16.4	88

Table G–1714. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-4.46E+03	4.45E+03	-4.40E+03	4.40E+03
A2	-4.46E+03	4.45E+03	-4.40E+03	4.40E+03
FD	-2.82E+03	2.82E+03	-2.79E+03	2.82E+03
L1	-8.37E+03	7.73E+03	-8.34E+03	7.70E+03
L3	-8.36E+03	7.73E+03	-8.34E+03	7.70E+03
L4	-8.02E+03	7.57E+03	-7.95E+03	7.54E+03
NF	—	—	—	—
NS	-3.76E+03	2.99E+03	-3.70E+03	2.93E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 180; Fn=0.0
fdif_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–858. Time history of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
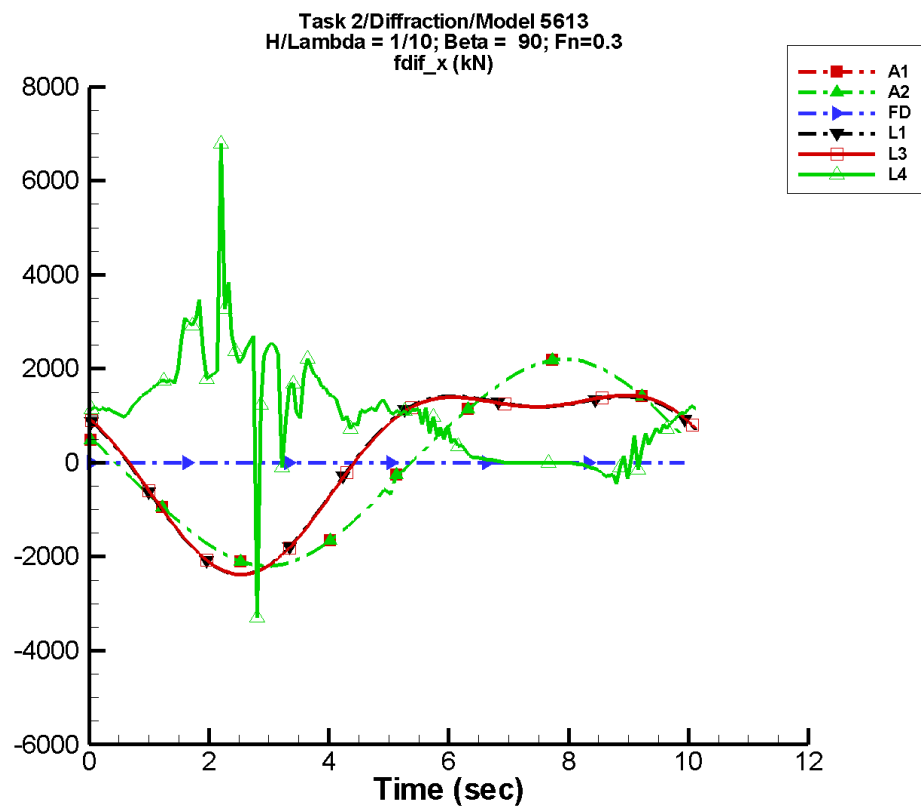
Table G–1715. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-33.3	1.34E+04	94	42.8	23
A2	-33.3	1.34E+04	94	42.8	23
FD	-2.95	8.47E+03	81	3.80	117
L1	-2.84E+03	2.41E+04	96	263.	4
L3	-2.84E+03	2.41E+04	95	263.	4
L4	-4.65E+03	1.88E+04	98	2.12E+03	175
NF	—	—	—	—	—
NS	-3.61E+03	8.99E+03	112	831.	176

Table G–1716. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.34E+04	1.34E+04	-1.32E+04	1.32E+04
A2	-1.34E+04	1.34E+04	-1.32E+04	1.32E+04
FD	-8.47E+03	8.47E+03	-8.38E+03	8.47E+03
L1	-2.70E+04	2.13E+04	-2.69E+04	2.12E+04
L3	-2.70E+04	2.13E+04	-2.69E+04	2.12E+04
L4	-2.43E+04	1.79E+04	-2.38E+04	1.73E+04
NF	—	—	—	—
NS	-1.31E+04	8.26E+03	-1.28E+04	7.02E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–859. Time history of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
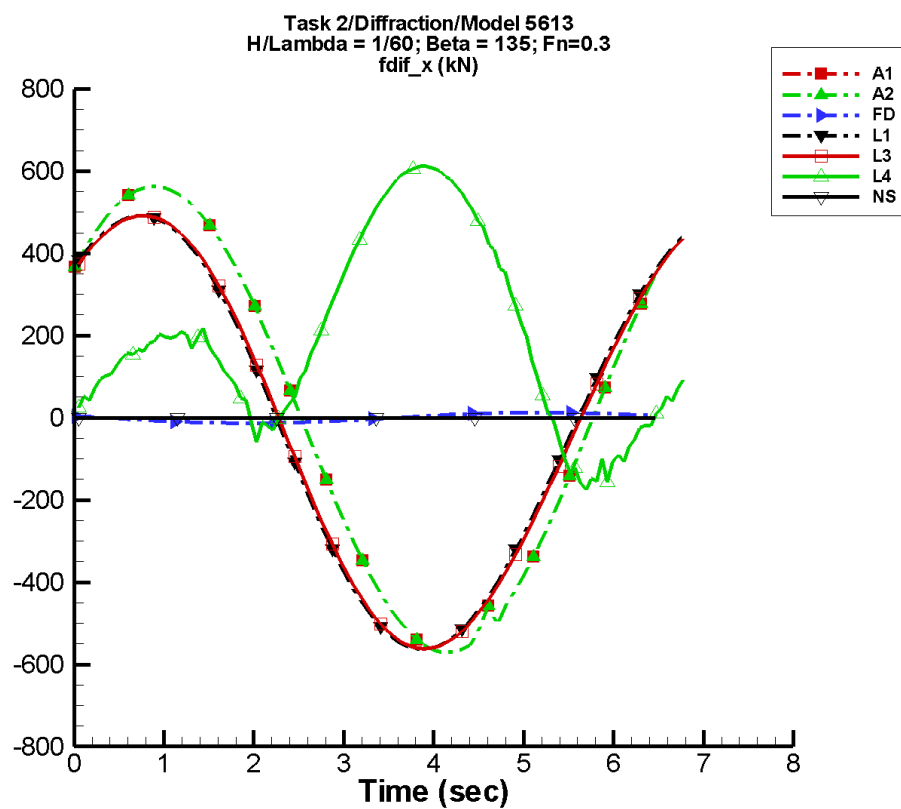
Table G–1717. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-44.4	1.79E+04	94	57.2	23
A2	-44.4	1.79E+04	94	57.2	23
FD	-3.94	1.13E+04	81	5.07	117
L1	-5.03E+03	3.22E+04	96	473.	3
L3	-5.03E+03	3.22E+04	95	473.	3
L4	-8.28E+03	2.13E+04	91	2.35E+03	-173
NF	—	—	—	—	—
NS	-6.00E+03	1.19E+04	115	1.11E+03	-140

Table G–1718. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.79E+04	1.79E+04	-1.77E+04	1.77E+04
A2	-1.79E+04	1.79E+04	-1.77E+04	1.77E+04
FD	-1.13E+04	1.13E+04	-1.12E+04	1.13E+04
L1	-3.73E+04	2.71E+04	-3.72E+04	2.70E+04
L3	-3.73E+04	2.71E+04	-3.72E+04	2.70E+04
L4	-3.15E+04	1.45E+04	-3.11E+04	1.41E+04
NF	—	—	—	—
NS	-1.86E+04	8.58E+03	-1.83E+04	7.89E+03

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–860. Time history of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
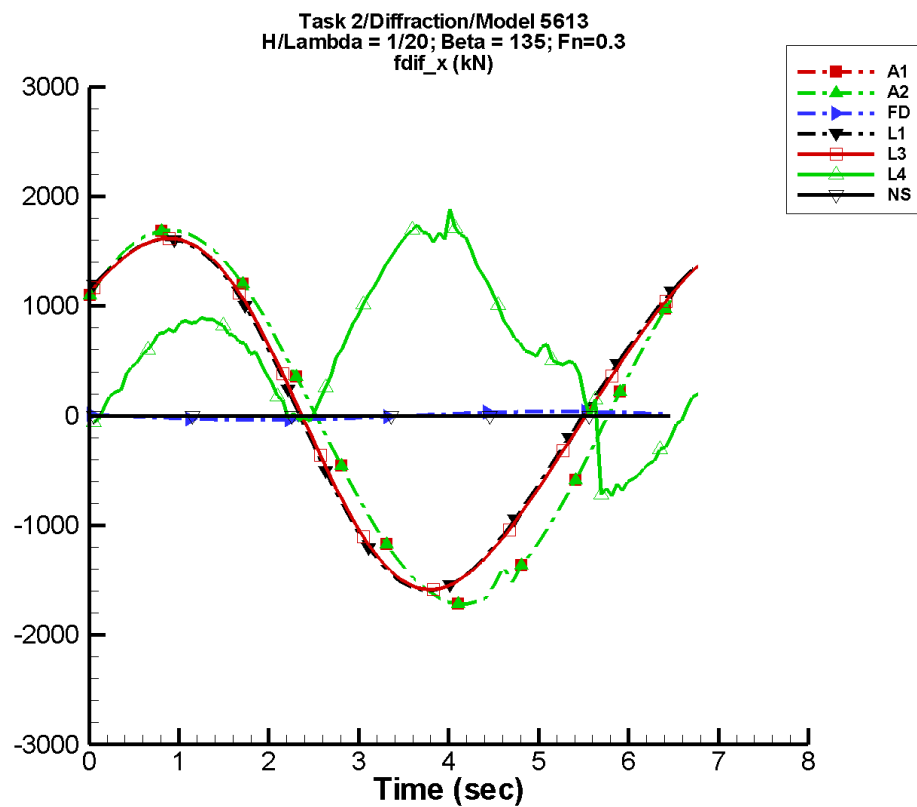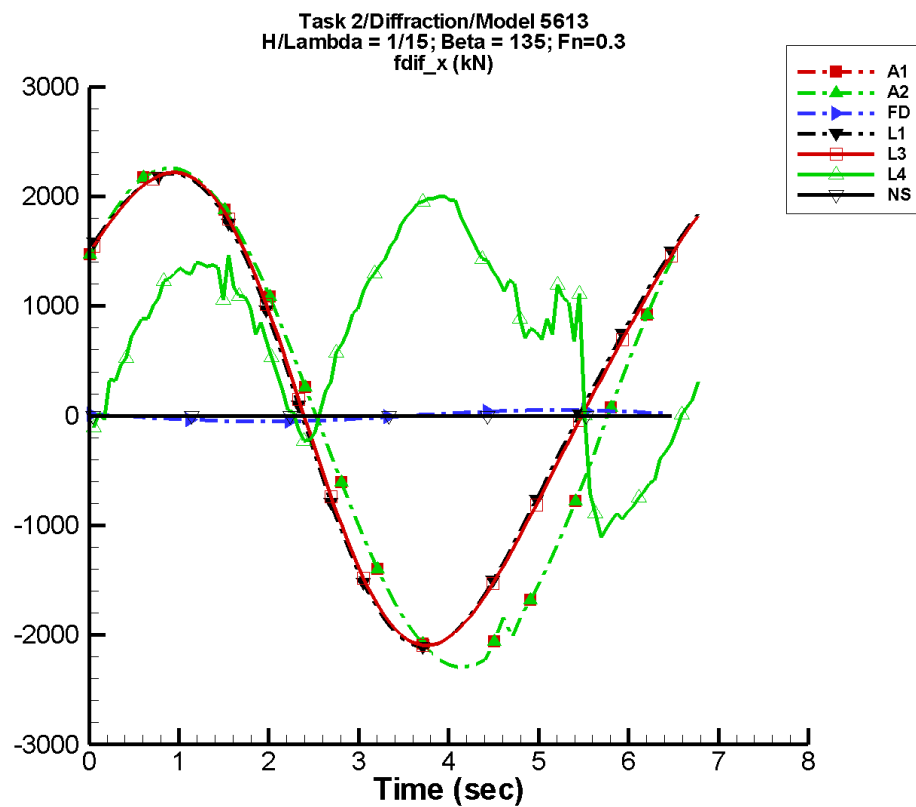
Table G–1719. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-66.7	2.69E+04	94	85.8	23
A2	-66.7	2.69E+04	94	85.8	23
FD	-5.91	1.69E+04	81	7.60	117
L1	-1.13E+04	4.83E+04	96	1.08E+03	2
L3	-1.13E+04	4.83E+04	95	1.08E+03	2
L4	-1.33E+04	2.20E+04	82	1.79E+03	-146
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1720. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.69E+04	2.68E+04	-2.65E+04	2.65E+04
A2	-2.69E+04	2.68E+04	-2.65E+04	2.65E+04
FD	-1.69E+04	1.69E+04	-1.68E+04	1.69E+04
L1	-5.98E+04	3.68E+04	-5.97E+04	3.67E+04
L3	-5.98E+04	3.69E+04	-5.96E+04	3.67E+04
L4	-5.89E+04	1.22E+04	-4.23E+04	8.54E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–861. Time history of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
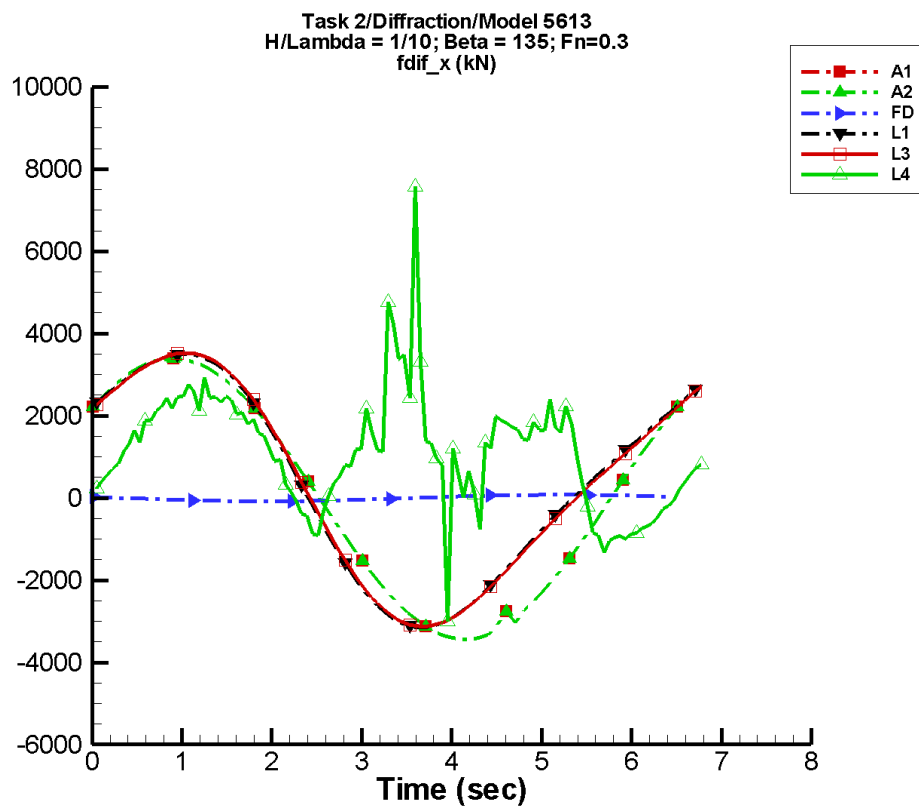
Table G–1721. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	9.20	3.08E+03	-125	71.2	164
A2	9.20	3.08E+03	-125	71.2	164
FD	-8.80E-02	2.99E+03	-132	0.303	-78
L1	-4.02E+03	2.87E+03	-164	28.5	-34
L3	-4.02E+03	2.87E+03	-164	28.5	-34
L4	-4.18E+03	1.57E+03	-179	345.	32
NF	—	—	—	—	—
NS	-114.	6.93E+03	-178	87.2	-158

Table G–1722. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-3.25E+03	3.07E+03	-3.24E+03	3.07E+03
A2	-3.25E+03	3.07E+03	-3.24E+03	3.07E+03
FD	-2.99E+03	2.99E+03	-2.99E+03	2.99E+03
L1	-6.87E+03	-1.13E+03	-6.87E+03	-1.13E+03
L3	-6.87E+03	-1.12E+03	-6.87E+03	-1.13E+03
L4	-6.10E+03	-2.57E+03	-6.07E+03	-2.59E+03
NF	—	—	—	—
NS	-7.19E+03	6.81E+03	-7.21E+03	6.72E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–862. Time history of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
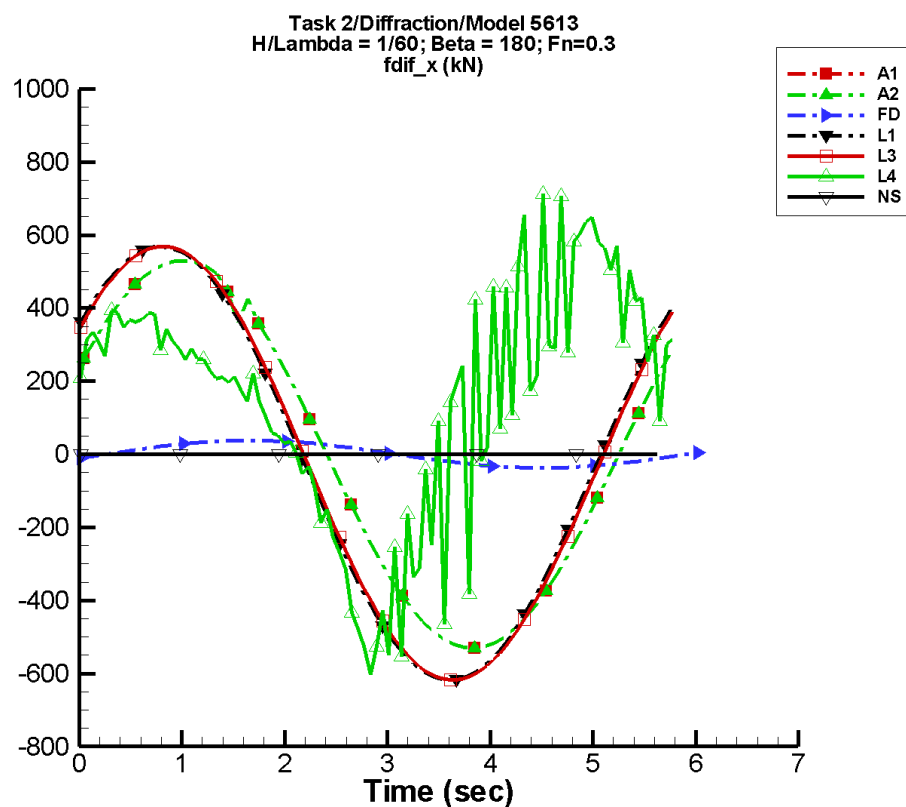
Table G–1723. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	27.7	9.27E+03	-125	214.	164
A2	27.7	9.27E+03	-125	214.	164
FD	-0.263	8.96E+03	-132	0.908	-78
L1	-6.36E+03	8.62E+03	-164	258.	-31
L3	-6.36E+03	8.62E+03	-164	258.	-31
L4	-5.19E+03	5.44E+03	163	1.29E+03	-21
NF	—	—	—	—	—
NS	-6.95E+03	1.86E+04	171	2.29E+03	-95

Table G–1724. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

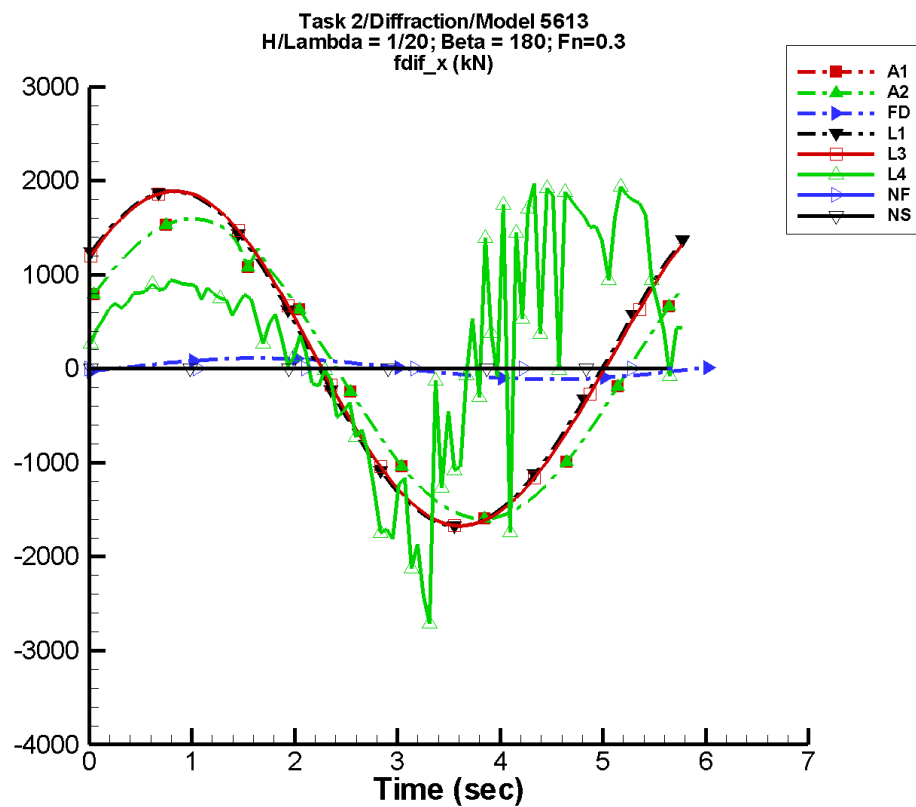| Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-9.77E+03	9.24E+03	-9.75E+03	9.23E+03
A2	-9.77E+03	9.24E+03	-9.75E+03	9.23E+03
FD	-8.96E+03	8.96E+03	-8.96E+03	8.96E+03
L1	-1.48E+04	2.50E+03	-1.47E+04	2.49E+03
L3	-1.48E+04	2.50E+03	-1.47E+04	2.49E+03
L4	-1.21E+04	379.	-1.13E+04	240.
NF	—	—	—	—
NS	-2.28E+04	1.28E+04	-2.28E+04	1.24E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–863. Time history of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
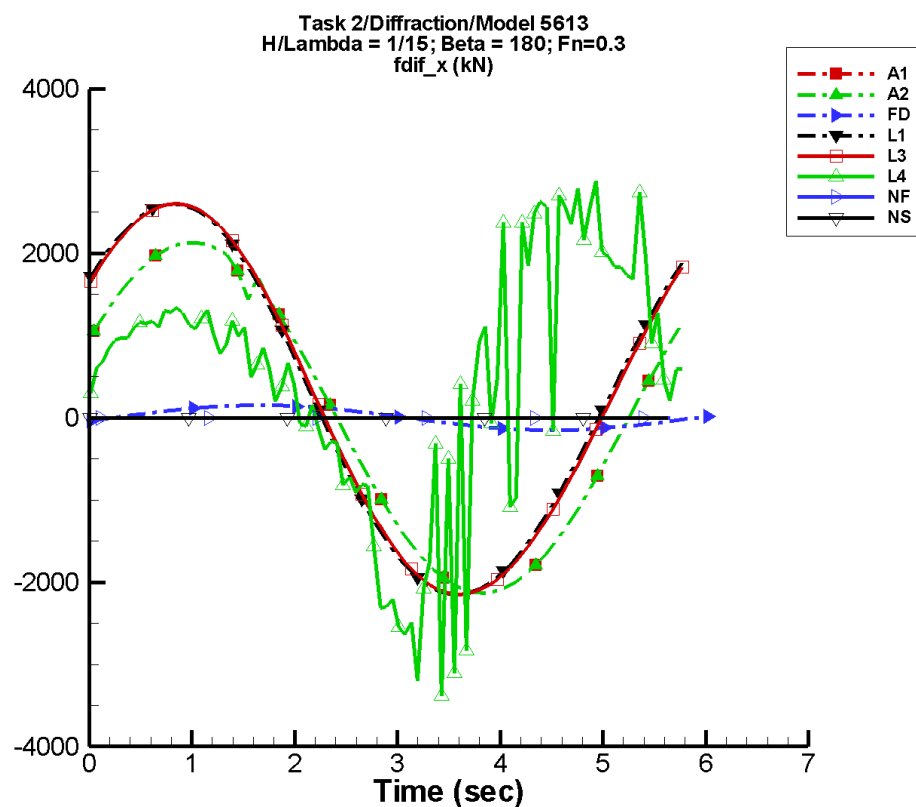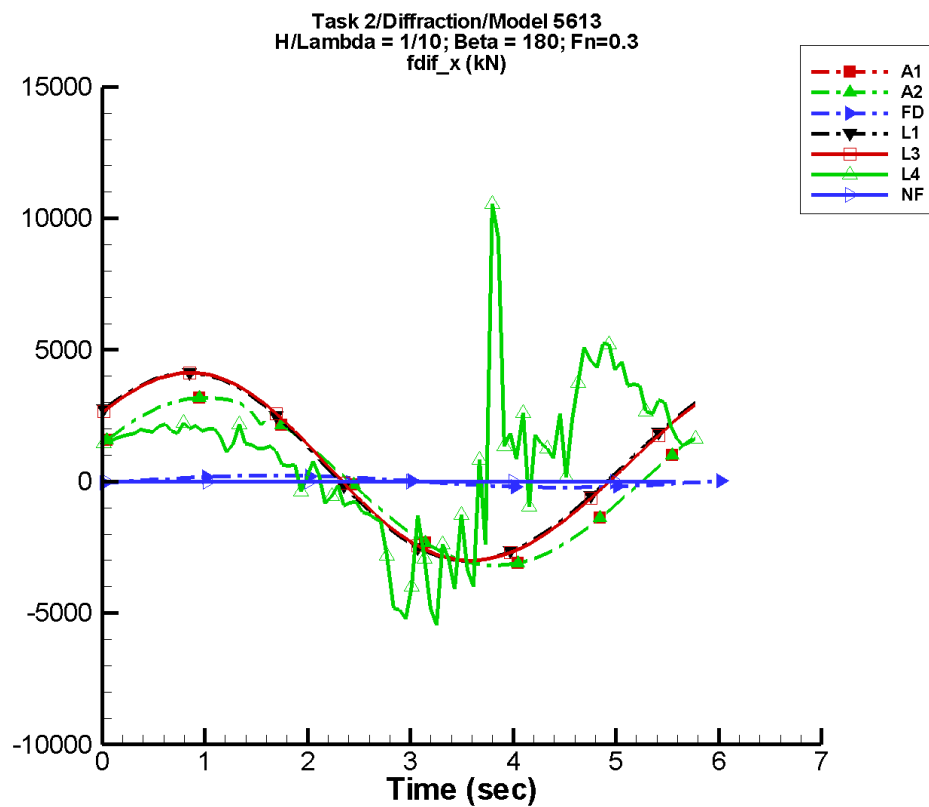
Table G–1725. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	36.9	1.24E+04	-125	286.	164
A2	36.9	1.24E+04	-125	286.	164
FD	-0.352	1.19E+04	-132	1.21	-78
L1	-8.40E+03	1.15E+04	-164	459.	-31
L3	-8.40E+03	1.15E+04	-164	459.	-31
L4	-6.24E+03	7.21E+03	146	1.24E+03	-66
NF	—	—	—	—	—
NS	-1.23E+04	2.33E+04	157	3.11E+03	-138

Table G–1726. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.30E+04	1.23E+04	-1.30E+04	1.23E+04
A2	-1.30E+04	1.23E+04	-1.30E+04	1.23E+04
FD	-1.19E+04	1.19E+04	-1.19E+04	1.19E+04
L1	-1.95E+04	3.51E+03	-1.95E+04	3.51E+03
L3	-1.95E+04	3.51E+03	-1.95E+04	3.51E+03
L4	-1.58E+04	1.60E+03	-1.40E+04	1.06E+03
NF	—	—	—	—
NS	-3.28E+04	1.32E+04	-3.24E+04	1.29E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–864. Time history of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
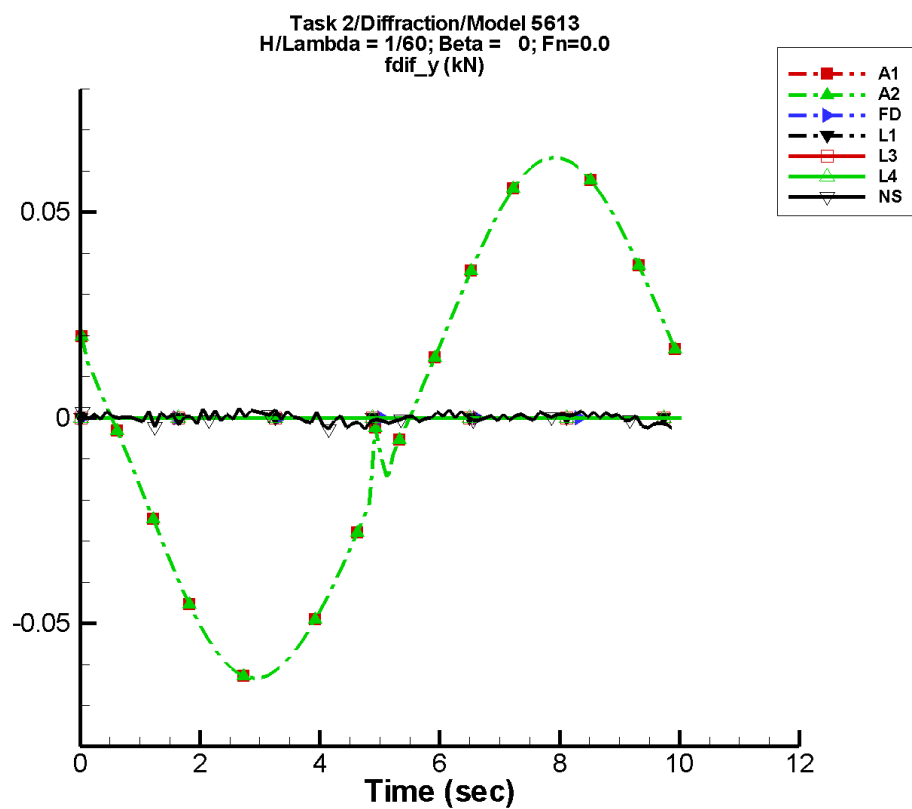
Table G–1727. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	55.4	1.86E+04	-125	429.	164
A2	55.4	1.86E+04	-125	429.	164
FD	-0.527	1.79E+04	-132	1.82	-78
L1	-1.42E+04	1.72E+04	-164	1.03E+03	-31
L3	-1.42E+04	1.72E+04	-164	1.03E+03	-30
L4	-6.61E+03	9.47E+03	140	716.	-108
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1728. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.96E+04	1.85E+04	-1.95E+04	1.85E+04
A2	-1.96E+04	1.85E+04	-1.95E+04	1.85E+04
FD	-1.79E+04	1.79E+04	-1.79E+04	1.79E+04
L1	-3.06E+04	3.95E+03	-3.06E+04	3.94E+03
L3	-3.06E+04	3.95E+03	-3.06E+04	3.94E+03
L4	-2.13E+04	1.57E+04	-1.72E+04	7.06E+03
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 45; Fn=0.3
fdif_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–865. Time history of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
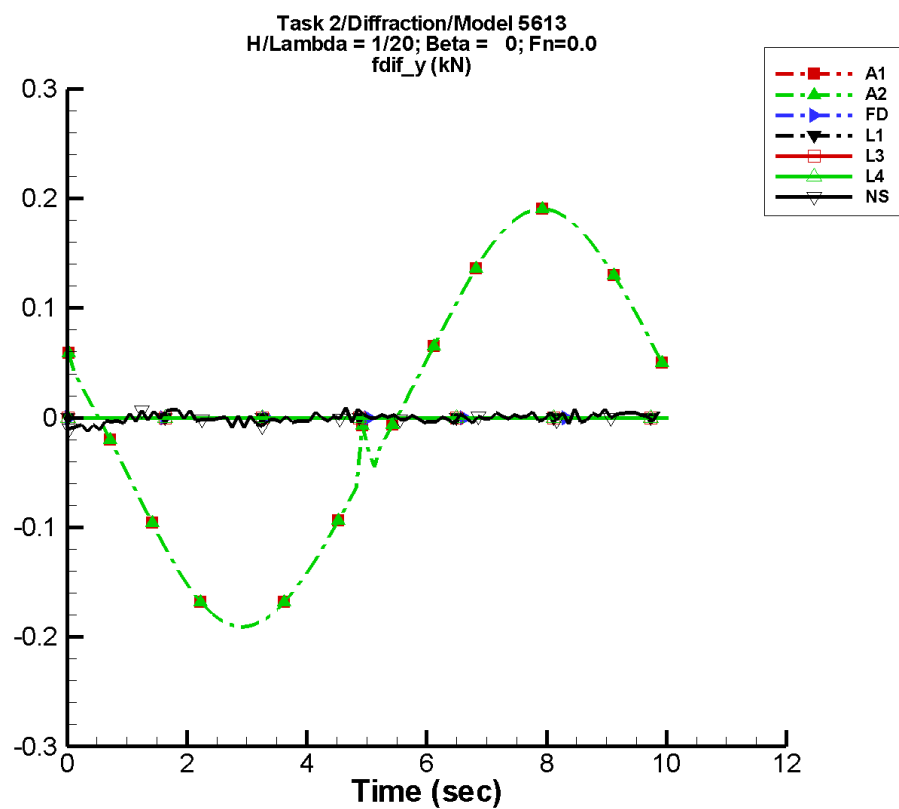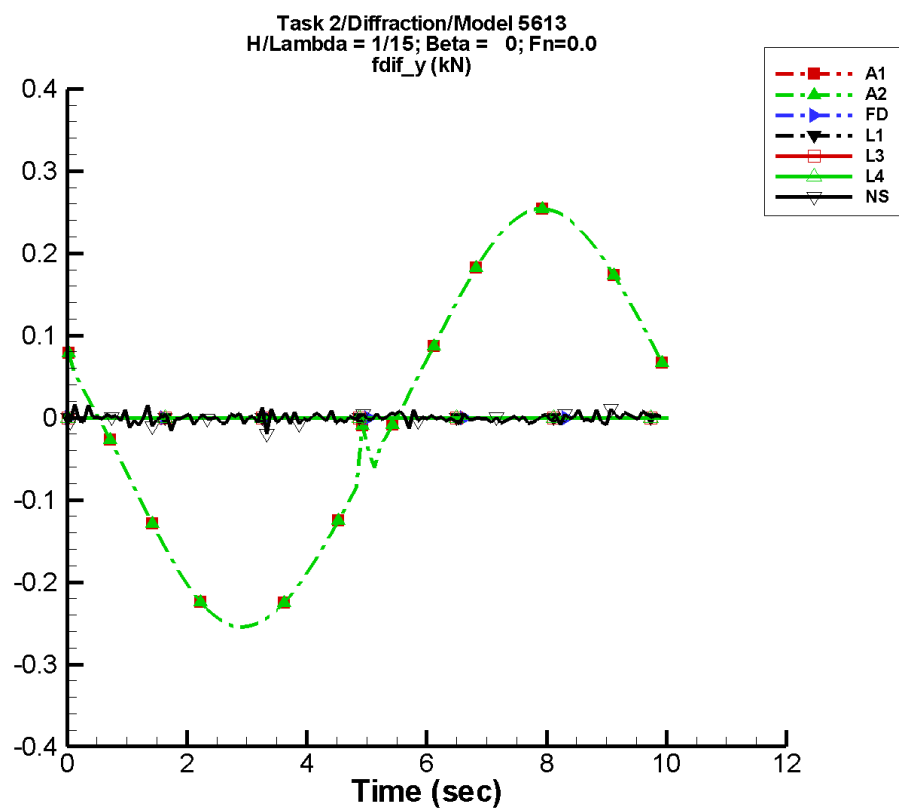
Table G–1729. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-6.53	6.15E+03	167	4.57	17
A2	-6.53	6.15E+03	167	4.57	17
FD	-1.40	5.71E+03	176	2.27	-31
L1	-4.25E+03	6.60E+03	168	20.4	-158
L3	-4.25E+03	6.60E+03	168	20.6	-158
L4	-4.58E+03	5.04E+03	157	665.	-67
NF	—	—	—	—	—
NS	-482.	8.95E+03	162	141.	-111

Table G–1730. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-6.24E+03	6.10E+03	-6.22E+03	6.09E+03
A2	-6.24E+03	6.10E+03	-6.22E+03	6.09E+03
FD	-5.71E+03	5.71E+03	-5.70E+03	5.70E+03
L1	-1.08E+04	2.36E+03	-1.08E+04	2.35E+03
L3	-1.08E+04	2.36E+03	-1.08E+04	2.35E+03
L4	-9.67E+03	650.	-9.61E+03	624.
NF	—	—	—	—
NS	-9.28E+03	8.54E+03	-9.20E+03	8.44E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–866. Time history of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
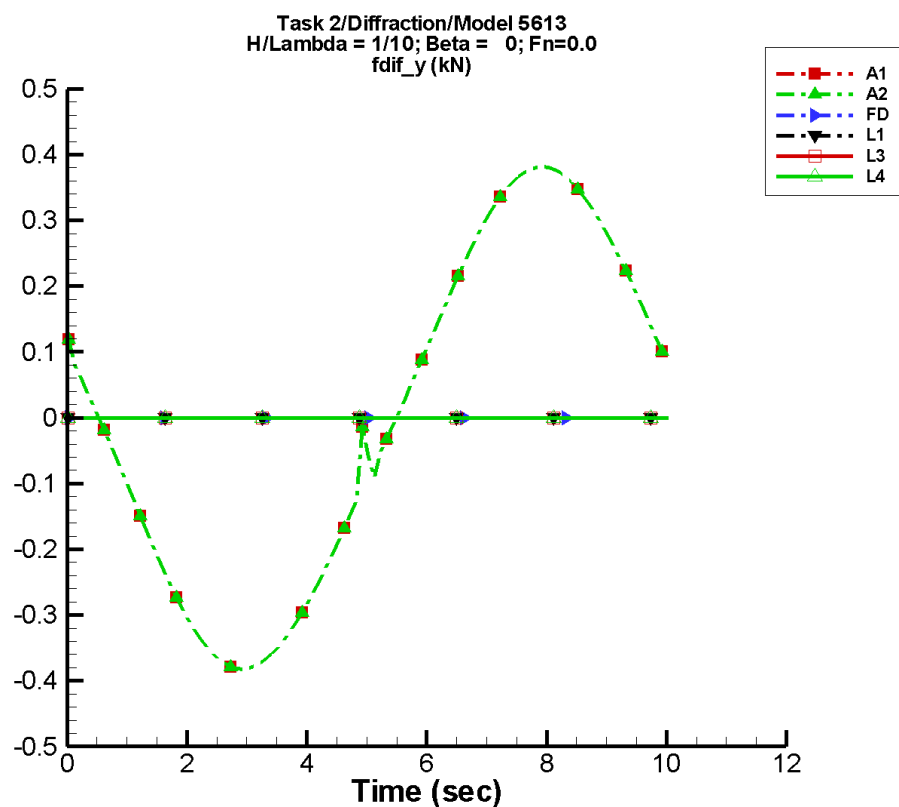
Table G–1731. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-19.6	1.85E+04	167	13.7	17
A2	-19.6	1.85E+04	167	13.7	17
FD	-4.19	1.71E+04	176	6.82	-31
L1	-8.41E+03	1.98E+04	168	188.	-159
L3	-8.41E+03	1.98E+04	168	189.	-159
L4	-8.44E+03	1.50E+04	147	2.35E+03	-93
NF	—	—	—	—	—
NS	-5.06E+03	2.53E+04	154	1.13E+03	-139

Table G–1732. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.88E+04	1.83E+04	-1.87E+04	1.83E+04
A2	-1.88E+04	1.83E+04	-1.87E+04	1.83E+04
FD	-1.71E+04	1.71E+04	-1.71E+04	1.71E+04
L1	-2.81E+04	1.15E+04	-2.80E+04	1.15E+04
L3	-2.81E+04	1.15E+04	-2.80E+04	1.15E+04
L4	-2.35E+04	7.85E+03	-2.27E+04	7.77E+03
NF	—	—	—	—
NS	-2.93E+04	2.11E+04	-2.88E+04	2.09E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–867. Time history of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
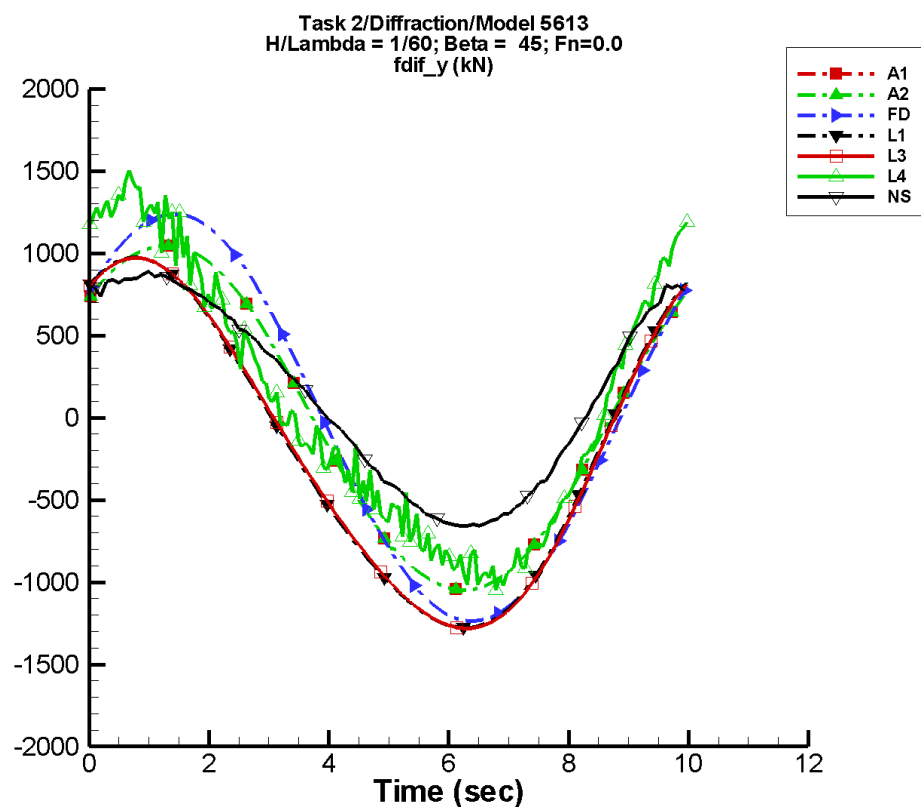
Table G–1733. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-26.2	2.47E+04	167	18.4	17
A2	-26.2	2.47E+04	167	18.4	17
FD	-5.59	2.29E+04	176	9.09	-31
L1	-1.20E+04	2.64E+04	168	336.	-159
L3	-1.20E+04	2.64E+04	168	337.	-160
L4	-1.14E+04	1.96E+04	140	3.25E+03	-121
NF	—	—	—	—	—
NS	-8.85E+03	3.30E+04	151	2.60E+03	-140

Table G–1734. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

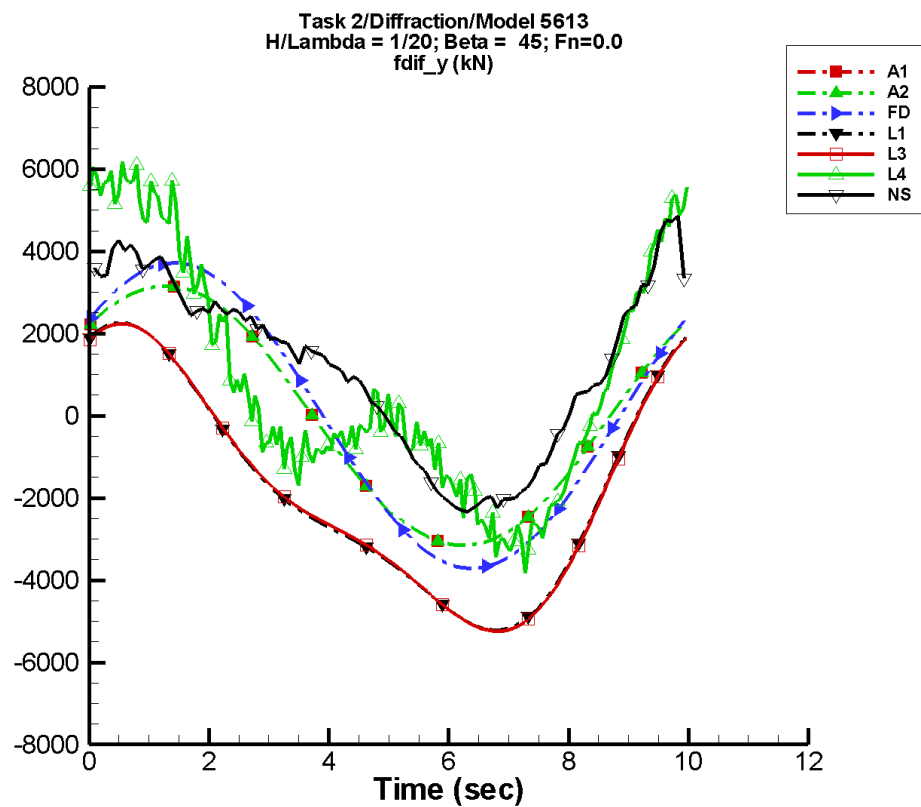| Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-2.50E+04	2.45E+04	-2.50E+04	2.44E+04
A2	-2.50E+04	2.45E+04	-2.50E+04	2.44E+04
FD	-2.29E+04	2.29E+04	-2.28E+04	2.28E+04
L1	-3.82E+04	1.46E+04	-3.82E+04	1.46E+04
L3	-3.82E+04	1.46E+04	-3.82E+04	1.46E+04
L4	-3.37E+04	1.08E+04	-2.99E+04	1.06E+04
NF	—	—	—	—
NS	-3.97E+04	2.65E+04	-3.88E+04	2.58E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–868. Time history of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
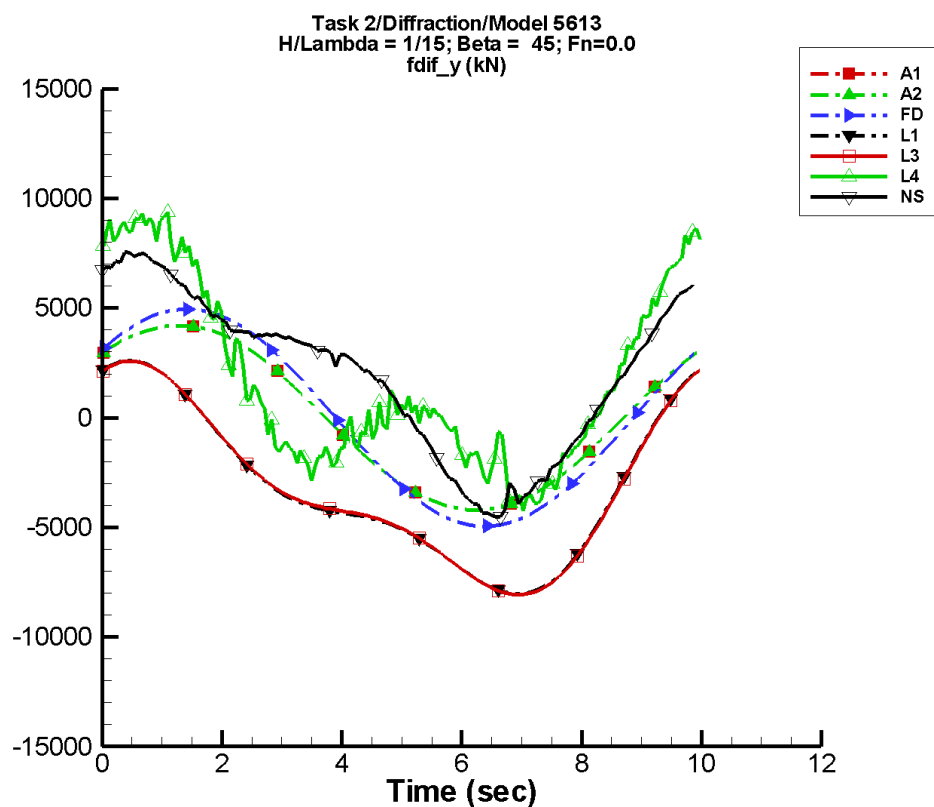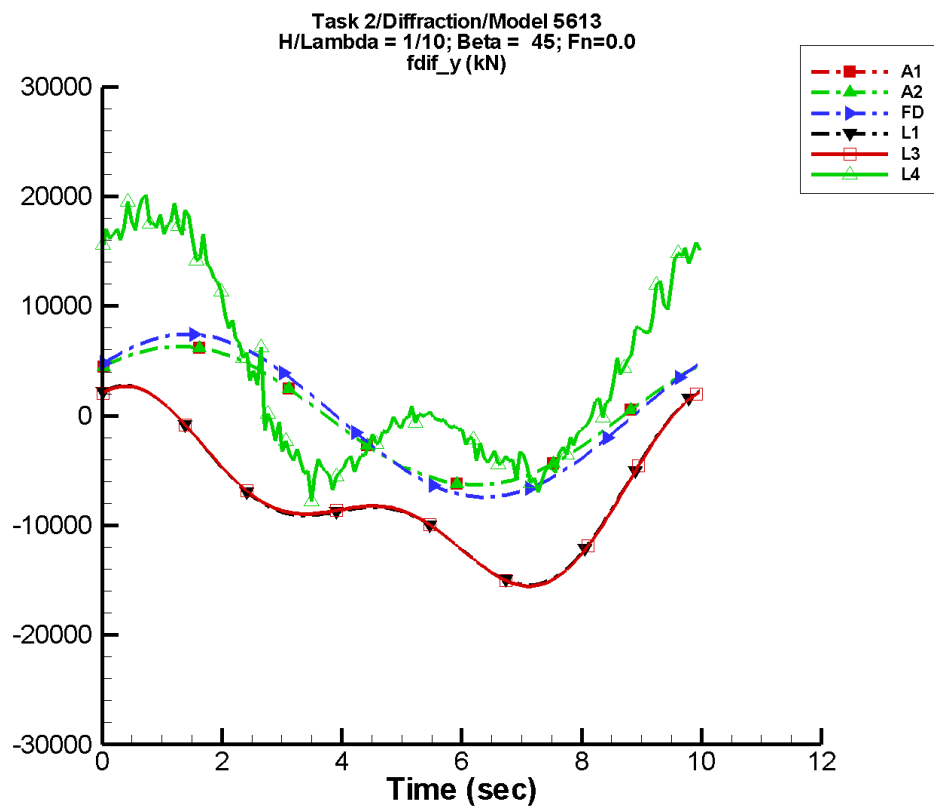
Table G–1735. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-39.3	3.70E+04	167	27.5	17
A2	-39.3	3.70E+04	167	27.5	17
FD	-8.38	3.43E+04	176	13.6	-31
L1	-2.24E+04	3.96E+04	168	759.	-160
L3	-2.24E+04	3.96E+04	168	760.	-160
L4	-1.37E+04	3.06E+04	135	2.36E+03	127
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1736. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-3.76E+04	3.67E+04	-3.75E+04	3.67E+04
A2	-3.76E+04	3.67E+04	-3.75E+04	3.67E+04
FD	-3.43E+04	3.43E+04	-3.42E+04	3.42E+04
L1	-6.15E+04	1.77E+04	-6.15E+04	1.77E+04
L3	-6.15E+04	1.77E+04	-6.15E+04	1.77E+04
L4	-5.18E+04	6.10E+04	-4.42E+04	2.48E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–869. Time history of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1737. Coefficients of the Fourier fit $a_0 + a_1 \sin\left(\omega t + \Phi_1\right) + a_2 \sin\left(2\omega t + \Phi_2\right) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	122.	1.13E+04	130	13.7	97
A2	122.	1.13E+04	130	13.7	97
FD	-5.01	1.09E+04	118	5.14	151
L1	-4.42E+03	1.13E+04	132	438.	56
L3	-4.42E+03	1.13E+04	131	438.	56
L4	-4.99E+03	1.04E+04	129	710.	76
NF	—	—	—	—	—
NS	-790.	1.01E+04	128	43.5	-45

Table G–1738. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-1.12E+04	1.15E+04	-1.11E+04	1.14E+04
A2	-1.12E+04	1.15E+04	-1.11E+04	1.14E+04
FD	-1.09E+04	1.09E+04	-1.08E+04	1.08E+04
L1	-1.60E+04	6.71E+03	-1.59E+04	6.68E+03
L3	-1.60E+04	6.73E+03	-1.59E+04	6.69E+03
L4	-1.57E+04	6.10E+03	-1.57E+04	5.88E+03
NF	—	—	—	—
NS	-1.11E+04	9.38E+03	-1.09E+04	9.23E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.3
fdif_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–870. Time history of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
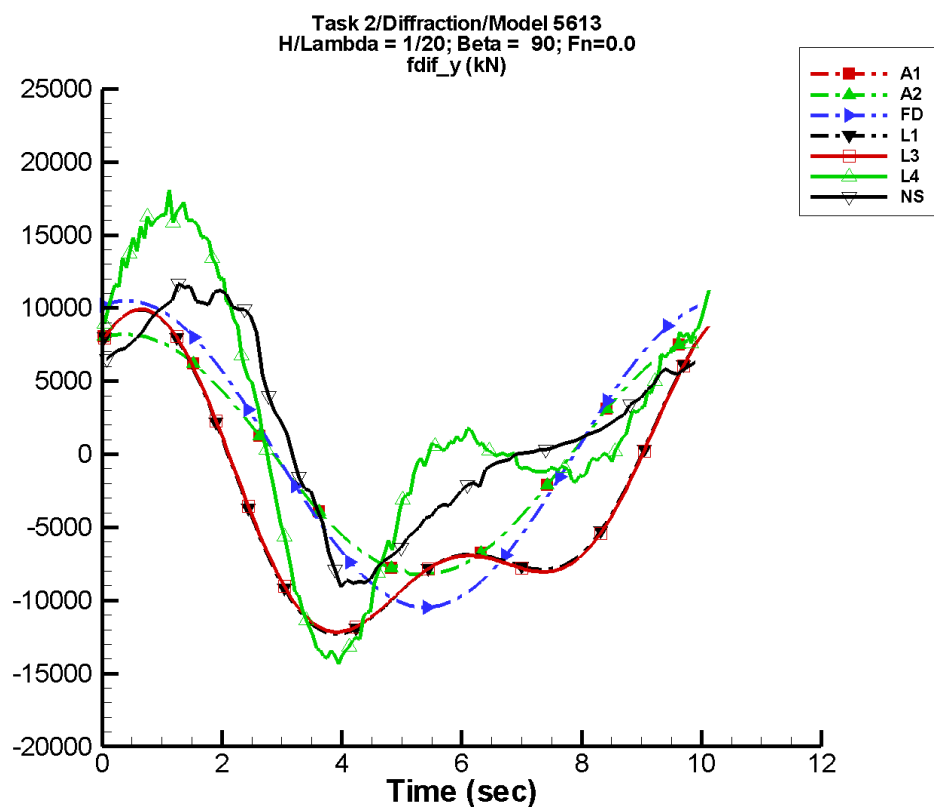
Table G–1739. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	368.	3.41E+04	130	41.1	97
A2	368.	3.41E+04	130	41.1	97
FD	-15.0	3.26E+04	118	15.4	151
L1	-9.95E+03	3.40E+04	132	3.94E+03	56
L3	-9.95E+03	3.40E+04	131	3.94E+03	56
L4	-1.18E+04	2.84E+04	126	2.46E+03	96
NF	—	—	—	—	—
NS	-6.53E+03	2.83E+04	129	1.08E+03	8

Table G–1740. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-3.37E+04	3.45E+04	-3.34E+04	3.42E+04
A2	-3.37E+04	3.45E+04	-3.34E+04	3.42E+04
FD	-3.26E+04	3.26E+04	-3.23E+04	3.23E+04
L1	-4.64E+04	2.30E+04	-4.62E+04	2.28E+04
L3	-4.63E+04	2.31E+04	-4.61E+04	2.30E+04
L4	-4.26E+04	2.12E+04	-4.20E+04	2.06E+04
NF	—	—	—	—
NS	-3.77E+04	2.48E+04	-3.67E+04	2.24E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–871. Time history of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
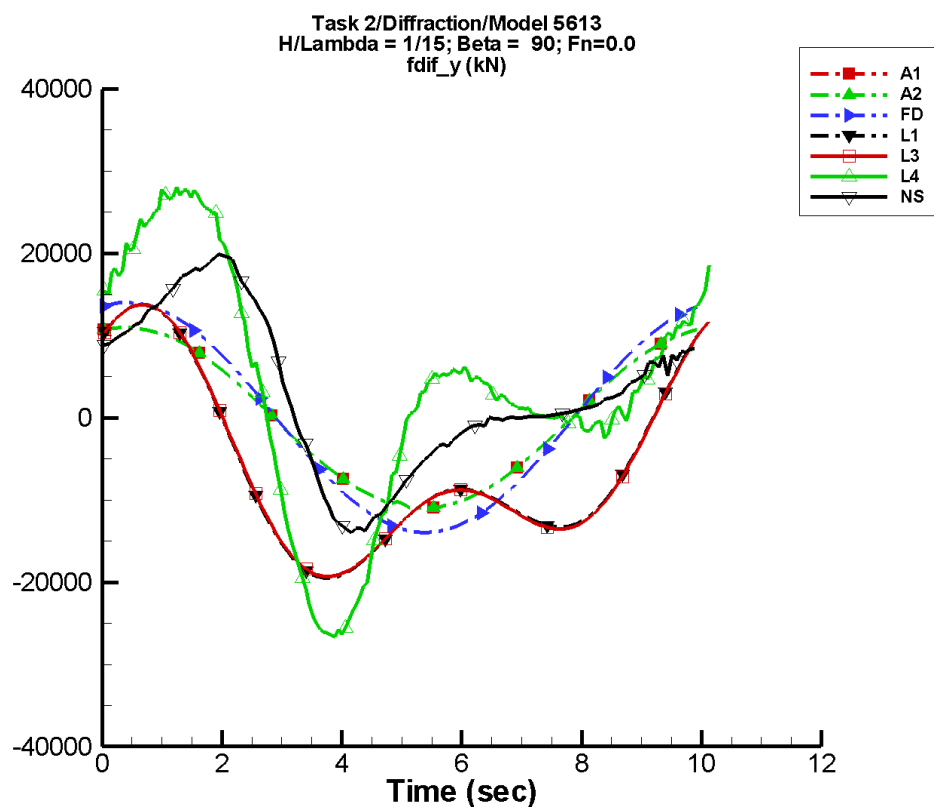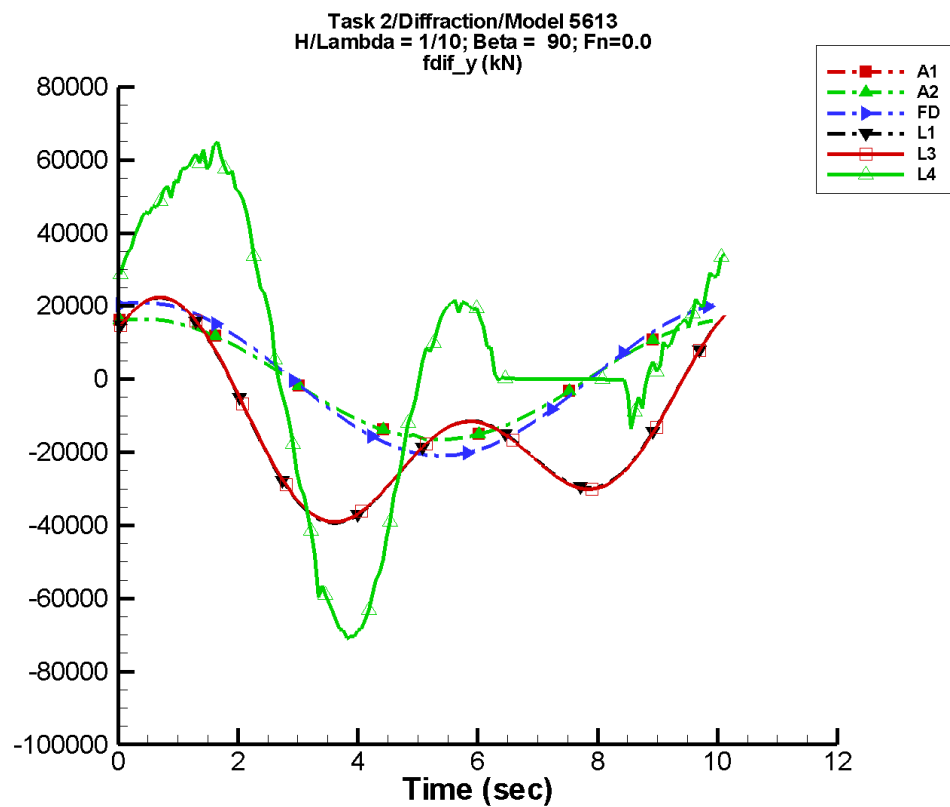
Table G–1741. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	491.	4.55E+04	130	54.9	97
A2	491.	4.55E+04	130	54.9	97
FD	-20.1	4.35E+04	118	20.6	151
L1	-1.48E+04	4.53E+04	132	7.00E+03	56
L3	-1.48E+04	4.53E+04	131	7.00E+03	56
L4	-1.66E+04	3.61E+04	124	4.04E+03	92
NF	—	—	—	—	—
NS	-9.52E+03	3.45E+04	128	1.53E+03	24

Table G–1742. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-4.50E+04	4.61E+04	-4.46E+04	4.56E+04
A2	-4.50E+04	4.61E+04	-4.46E+04	4.56E+04
FD	-4.35E+04	4.35E+04	-4.30E+04	4.30E+04
L1	-6.47E+04	2.92E+04	-6.44E+04	2.90E+04
L3	-6.45E+04	2.94E+04	-6.43E+04	2.93E+04
L4	-5.90E+04	2.92E+04	-5.71E+04	2.78E+04
NF	—	—	—	—
NS	-4.89E+04	3.74E+04	-4.78E+04	2.90E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–872. Time history of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
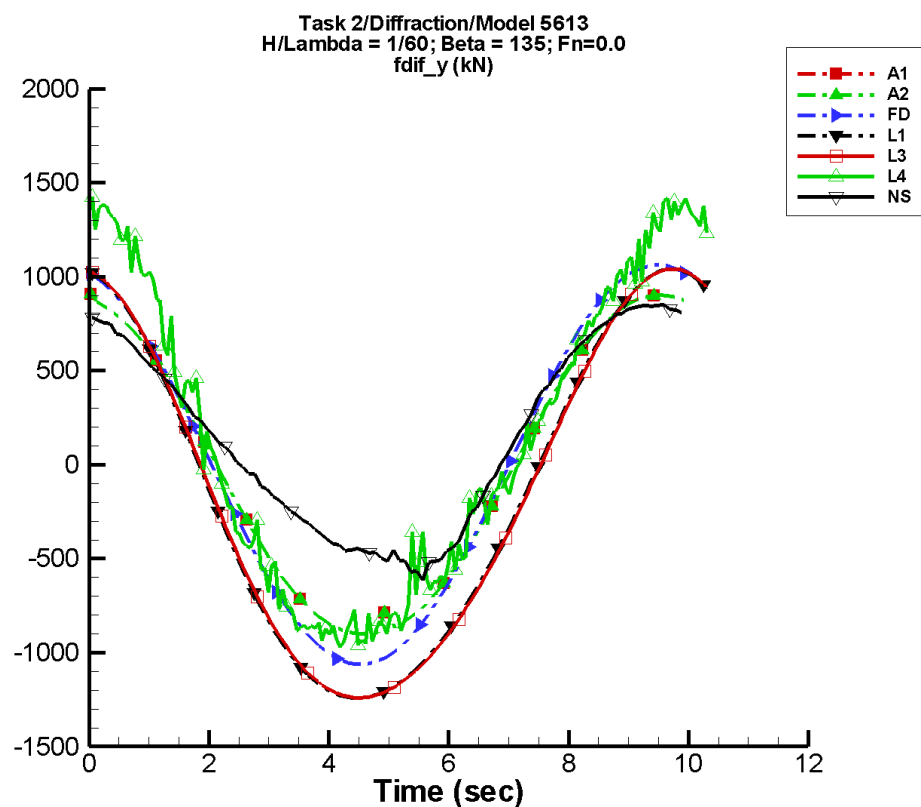
Table G–1743. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	736.	6.82E+04	130	82.3	97
A2	736.	6.82E+04	130	82.3	97
FD	-30.1	6.52E+04	118	30.8	151
L1	-2.86E+04	6.79E+04	132	1.57E+04	56
L3	-2.86E+04	6.79E+04	131	1.57E+04	56
L4	-2.32E+04	4.60E+04	127	1.79E+03	-84
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1744. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-6.75E+04	6.91E+04	-6.69E+04	6.84E+04
A2	-6.75E+04	6.91E+04	-6.69E+04	6.84E+04
FD	-6.52E+04	6.52E+04	-6.45E+04	6.46E+04
L1	-1.08E+05	3.87E+04	-1.08E+05	3.84E+04
L3	-1.07E+05	3.92E+04	-1.07E+05	3.89E+04
L4	-1.13E+05	4.40E+04	-9.12E+04	4.02E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–873. Time history of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

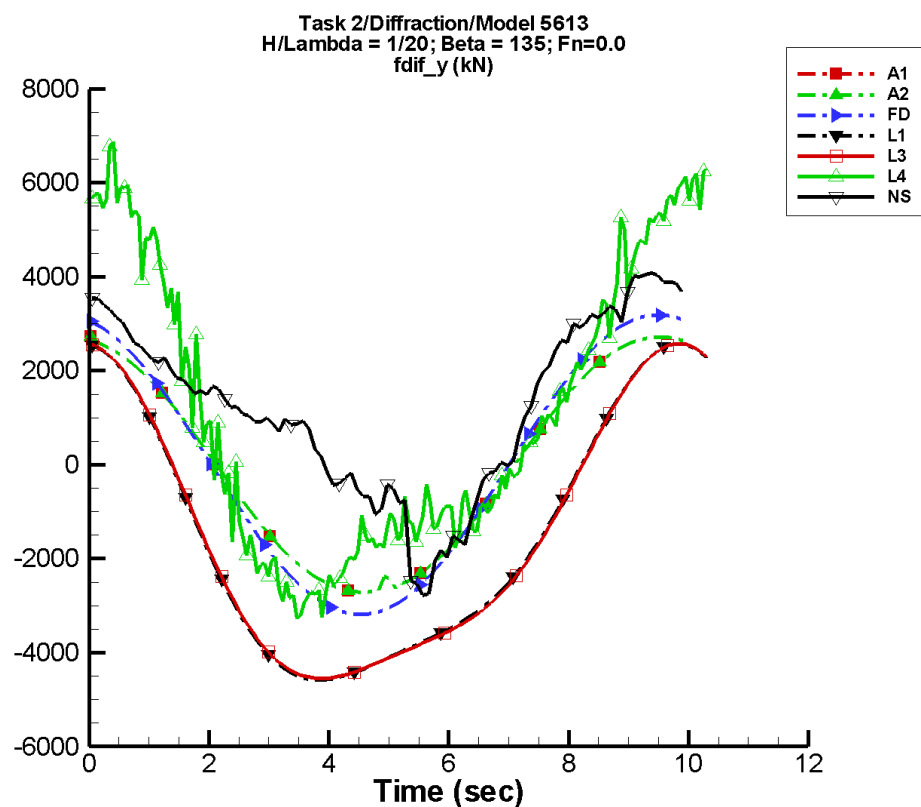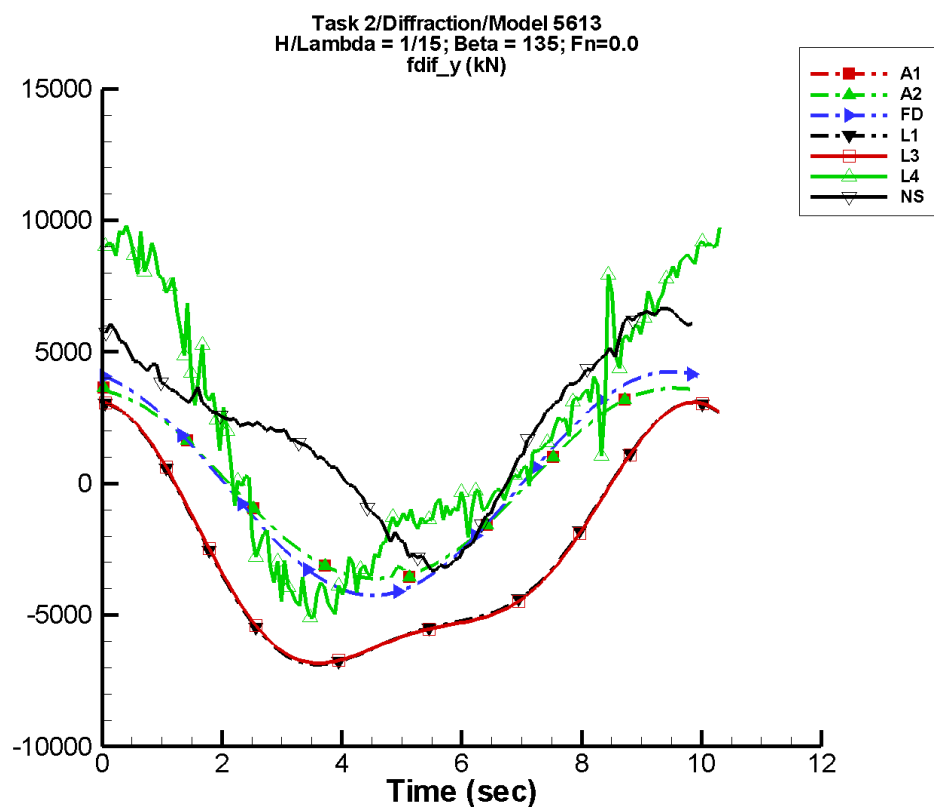Table G–1745. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	17.8	6.39E+03	107	16.6	155
A2	17.8	6.39E+03	107	16.6	155
FD	0.142	5.25E+03	107	0.221	-124
L1	-4.24E+03	7.94E+03	116	20.4	-63
L3	-4.24E+03	7.93E+03	114	20.4	-63
L4	-5.15E+03	8.04E+03	108	1.03E+03	-156
NF	—	—	—	—	—
NS	-551.	4.74E+03	121	100.	-106

Table G–1746. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-6.33E+03	6.38E+03	-6.19E+03	6.23E+03
A2	-6.33E+03	6.38E+03	-6.19E+03	6.23E+03
FD	-5.24E+03	5.24E+03	-5.12E+03	5.12E+03
L1	-1.22E+04	3.68E+03	-1.21E+04	3.61E+03
L3	-1.22E+04	3.67E+03	-1.21E+04	3.60E+03
L4	-1.33E+04	4.34E+03	-1.32E+04	3.92E+03
NF	—	—	—	—
NS	-5.37E+03	4.32E+03	-5.27E+03	4.19E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–874. Time history of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
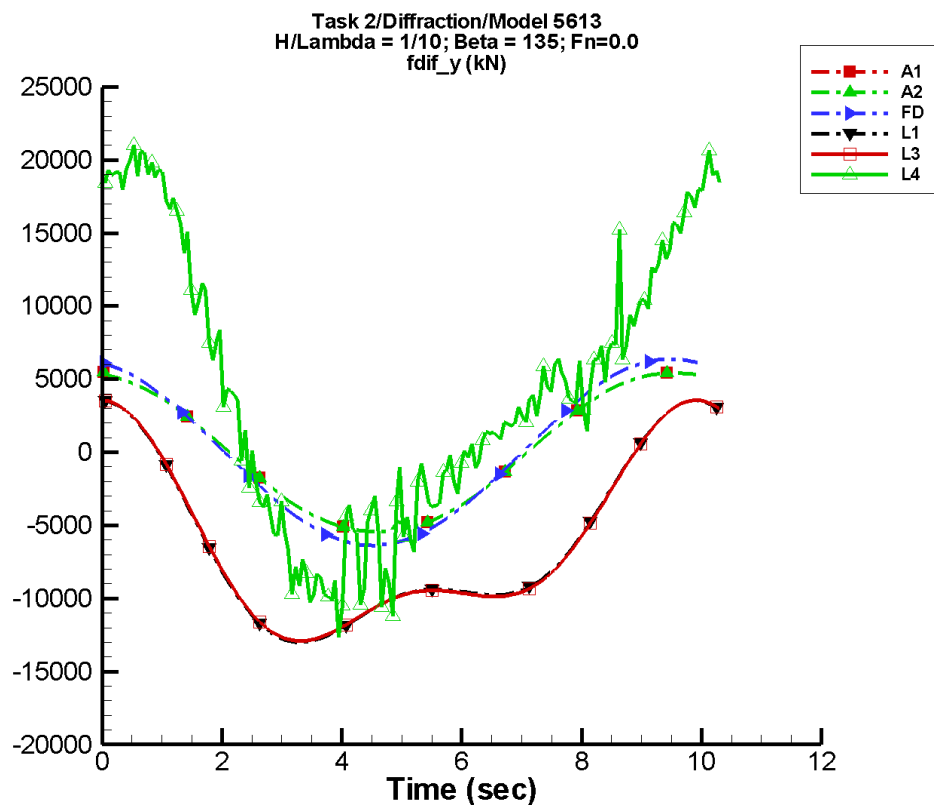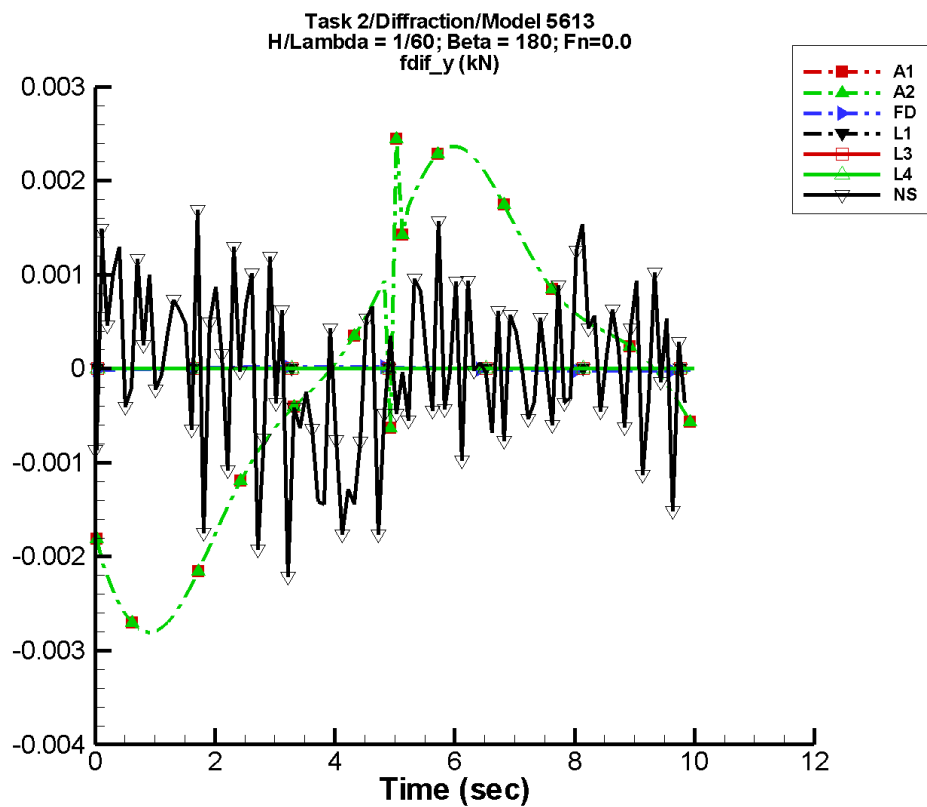
Table G–1747. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	53.6	1.92E+04	107	49.9	155
A2	53.6	1.92E+04	107	49.9	155
FD	0.426	1.57E+04	107	0.663	-124
L1	-8.32E+03	2.38E+04	116	185.	-63
L3	-8.32E+03	2.38E+04	114	185.	-63
L4	-1.27E+04	2.05E+04	109	3.91E+03	-150
NF	—	—	—	—	—
NS	-5.92E+03	1.30E+04	125	1.53E+03	-139

Table G–1748. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.90E+04	1.92E+04	-1.86E+04	1.87E+04
A2	-1.90E+04	1.92E+04	-1.86E+04	1.87E+04
FD	-1.57E+04	1.57E+04	-1.54E+04	1.53E+04
L1	-3.23E+04	1.53E+04	-3.21E+04	1.51E+04
L3	-3.23E+04	1.53E+04	-3.21E+04	1.51E+04
L4	-3.31E+04	1.47E+04	-3.29E+04	1.23E+04
NF	—	—	—	—
NS	-1.97E+04	9.71E+03	-1.86E+04	8.87E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.3
fdif_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–875. Time history of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1749. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	71.5	2.56E+04	107	66.6	155
A2	71.5	2.56E+04	107	66.6	155
FD	0.568	2.10E+04	107	0.884	-124
L1	-1.19E+04	3.17E+04	116	329.	-63
L3	-1.19E+04	3.17E+04	114	329.	-63
L4	-1.80E+04	2.49E+04	107	5.10E+03	-147
NF	—	—	—	—	—
NS	-8.26E+03	1.57E+04	129	1.33E+03	-119

Table G–1750. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
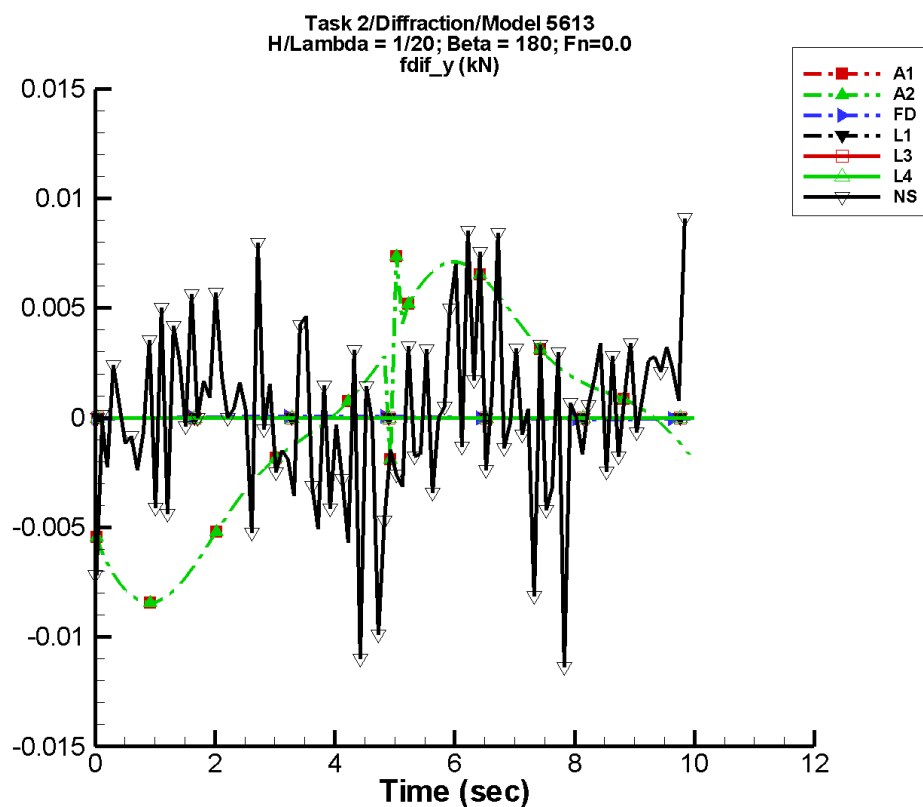
Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.54E+04	2.56E+04	-2.48E+04	2.50E+04
A2	-2.54E+04	2.56E+04	-2.48E+04	2.50E+04
FD	-2.10E+04	2.10E+04	-2.05E+04	2.05E+04
L1	-4.39E+04	1.96E+04	-4.36E+04	1.93E+04
L3	-4.39E+04	1.96E+04	-4.36E+04	1.93E+04
L4	-4.28E+04	2.07E+04	-4.23E+04	1.16E+04
NF	—	—	—	—
NS	-2.48E+04	1.02E+04	-2.41E+04	9.47E+03

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–876. Time history of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
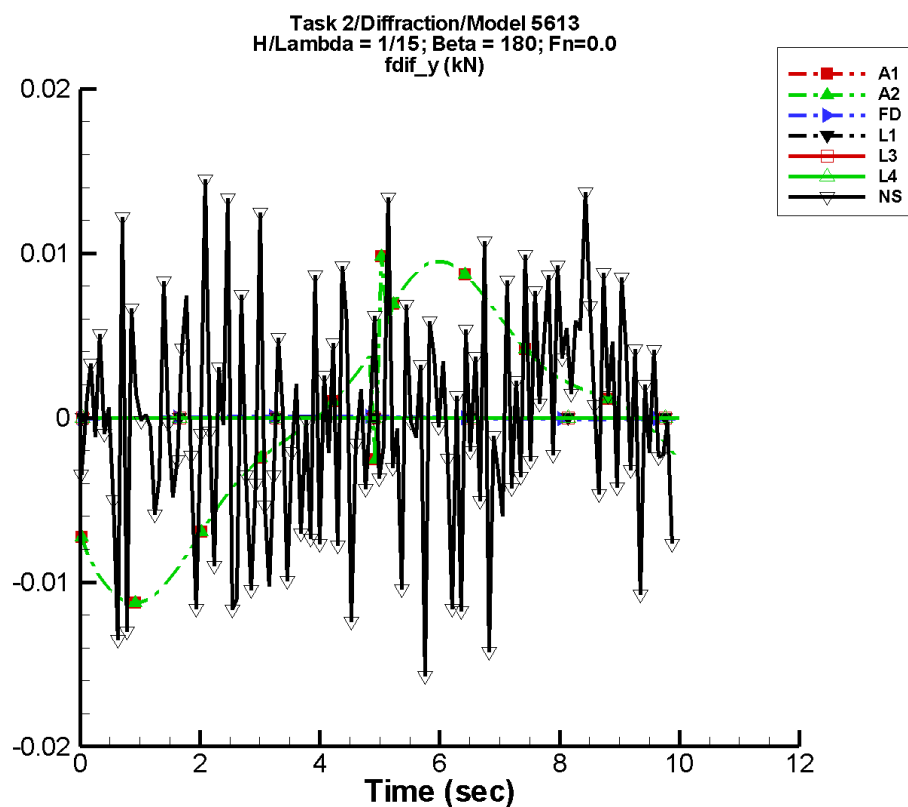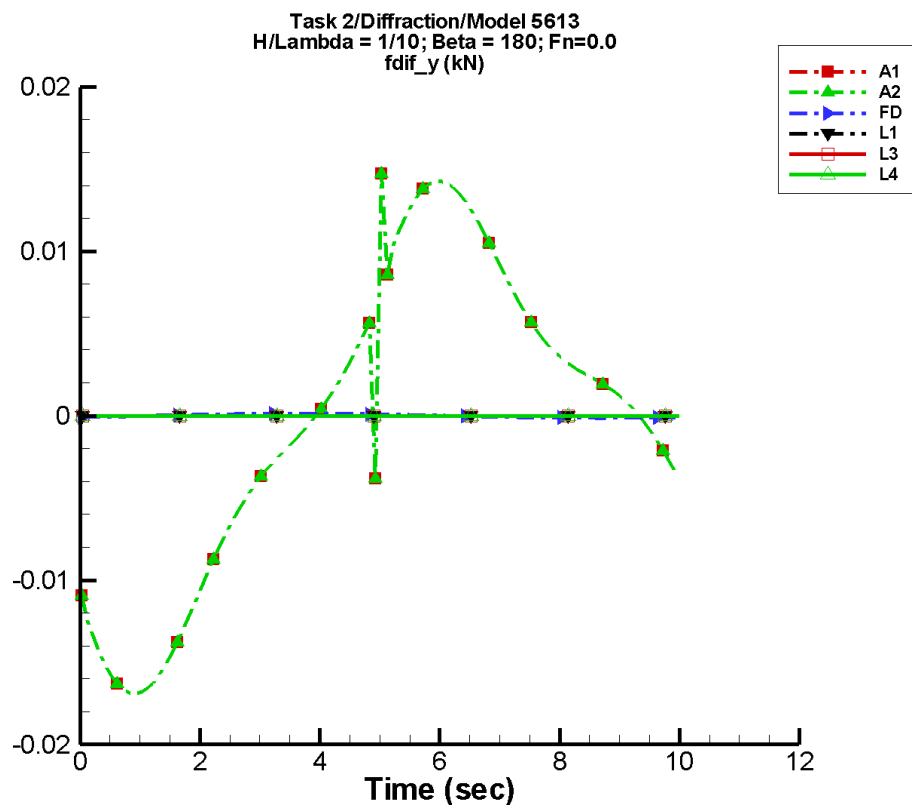
Table G–1751. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	107.	3.85E+04	107	100.	155
A2	107.	3.85E+04	107	100.	155
FD	0.852	3.15E+04	107	1.33	-124
L1	-2.21E+04	4.76E+04	116	740.	-63
L3	-2.21E+04	4.76E+04	114	740.	-63
L4	-2.59E+04	2.86E+04	116	3.61E+03	-151
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1752. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-3.81E+04	3.84E+04	-3.73E+04	3.75E+04
A2	-3.81E+04	3.84E+04	-3.73E+04	3.75E+04
FD	-3.15E+04	3.15E+04	-3.07E+04	3.07E+04
L1	-7.04E+04	2.49E+04	-6.99E+04	2.45E+04
L3	-7.04E+04	2.49E+04	-6.99E+04	2.45E+04
L4	-8.34E+04	1.33E+04	-6.17E+04	1.02E+04
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 180; Fn=0.3
fdif_z (kN)

Data identically zero, insufficient, or not available from NFA.

Figure G–877. Time history of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
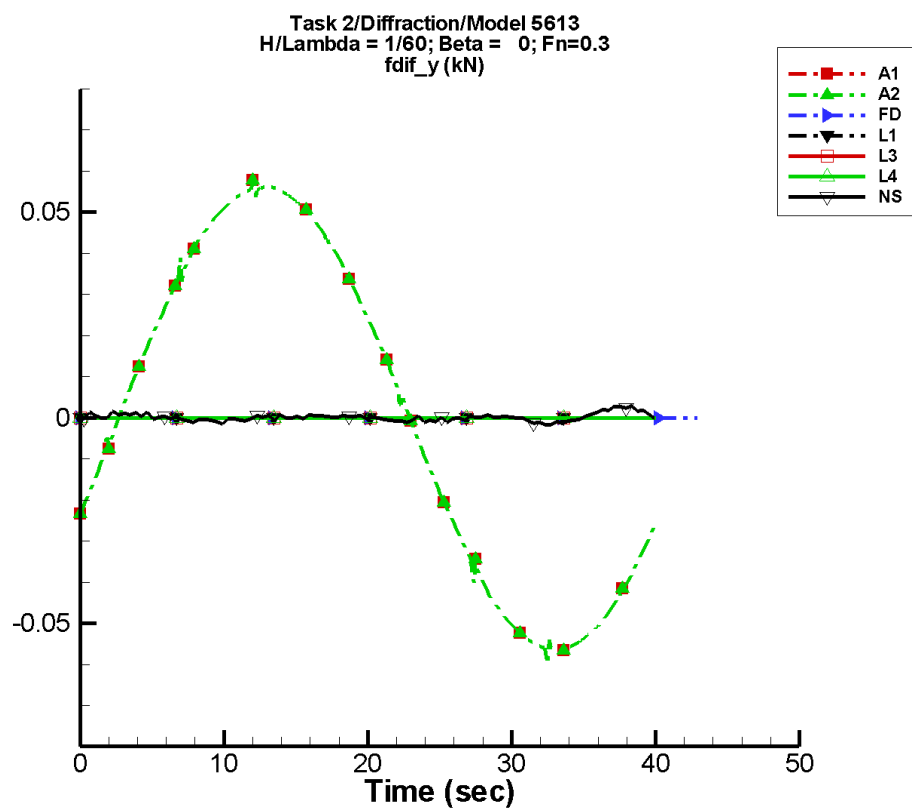
Table G–1753. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-30.9	2.90E+03	97	46.6	-71
A2	-30.9	2.90E+03	97	46.6	-71
FD	-2.11	1.82E+03	72	2.41	35
L1	-4.10E+03	4.67E+03	92	38.2	116
L3	-4.10E+03	4.66E+03	90	38.2	116
L4	-5.03E+03	4.90E+03	78	512.	92
NF	—	—	—	—	—
NS	-497.	2.35E+03	125	90.4	-109

Table G–1754. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-2.96E+03	2.83E+03	-2.87E+03	2.74E+03
A2	-2.96E+03	2.83E+03	-2.87E+03	2.74E+03
FD	-1.82E+03	1.82E+03	-1.76E+03	1.76E+03
L1	-8.73E+03	614.	-8.68E+03	560.
L3	-8.73E+03	605.	-8.68E+03	551.
L4	-1.00E+04	1.34E+03	-9.88E+03	764.
NF	—	—	—	—
NS	-2.95E+03	1.87E+03	-2.85E+03	1.79E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–878. Time history of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
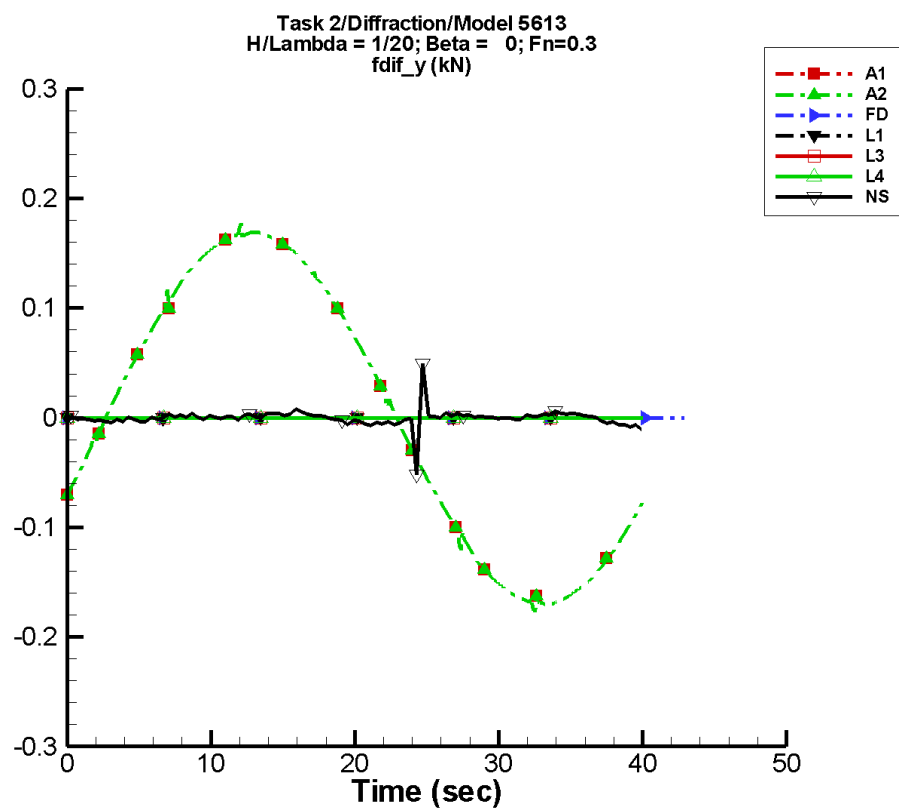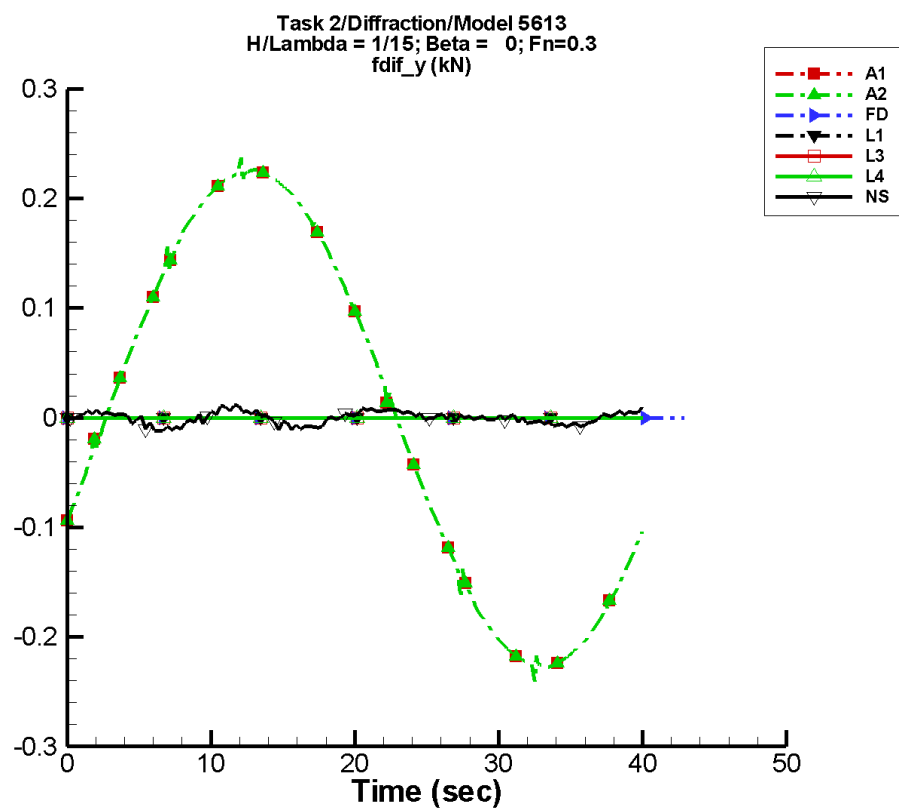
Table G–1755. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-92.9	8.71E+03	97	140.	-71
A2	-92.9	8.71E+03	97	140.	-71
FD	-6.34	5.46E+03	72	7.23	35
L1	-6.97E+03	1.40E+04	92	310.	119
L3	-6.97E+03	1.40E+04	90	310.	119
L4	-1.21E+04	1.15E+04	81	1.46E+03	132
NF	—	—	—	—	—
NS	-4.93E+03	6.86E+03	130	961.	-155

Table G–1756. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Unfiltered Maximum (kN)	Filtered Minimum (kN)	Filtered Maximum (kN)
A1	-8.92E+03	8.51E+03	-8.64E+03	8.25E+03
A2	-8.92E+03	8.51E+03	-8.64E+03	8.25E+03
FD	-5.46E+03	5.46E+03	-5.29E+03	5.27E+03
L1	-2.07E+04	7.34E+03	-2.06E+04	7.17E+03
L3	-2.07E+04	7.32E+03	-2.05E+04	7.15E+03
L4	-2.55E+04	4.94E+03	-2.42E+04	2.88E+03
NF	—	—	—	—
NS	-1.27E+04	3.00E+03	-1.22E+04	2.41E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–879. Time history of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
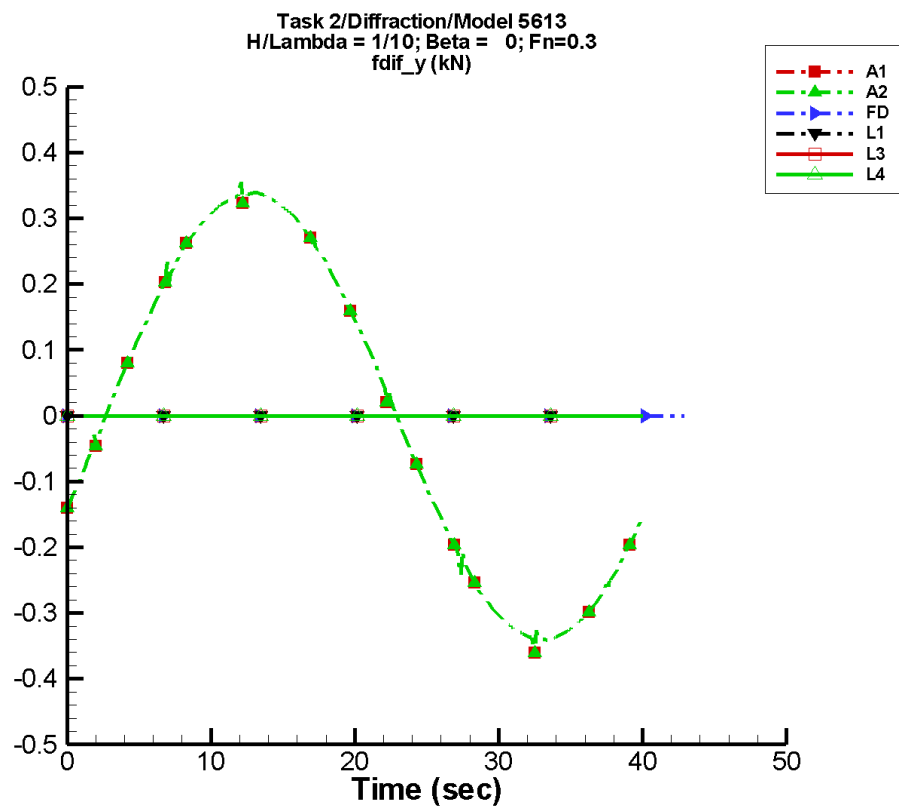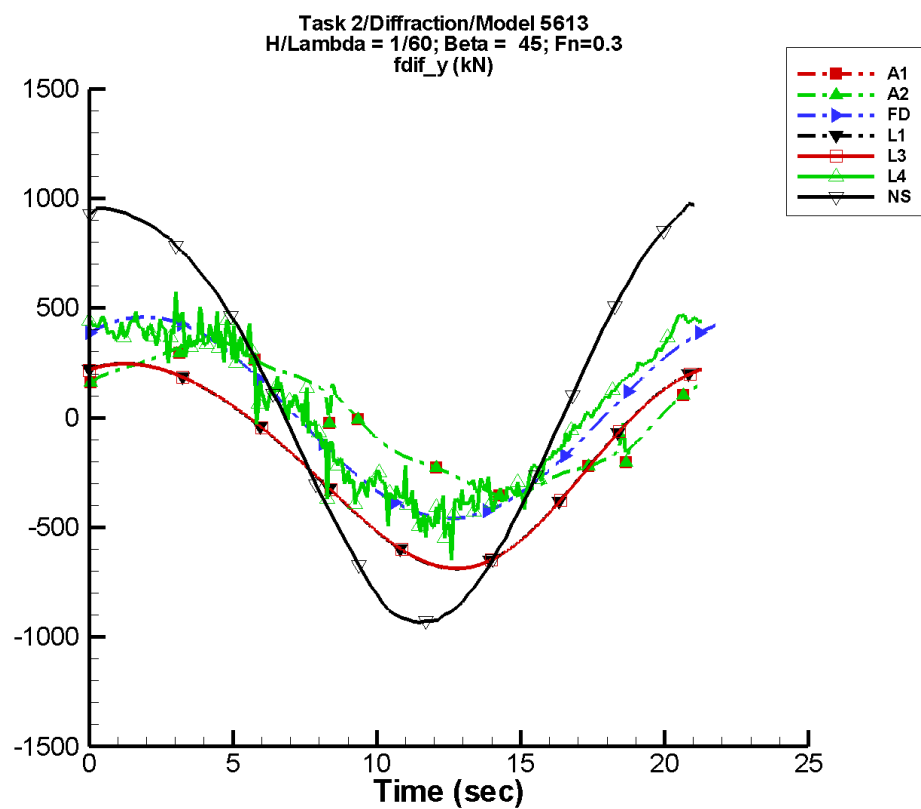
Table G–1757. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-124.	1.16E+04	97	187.	-71
A2	-124.	1.16E+04	97	187.	-71
FD	-8.45	7.28E+03	72	9.64	35
L1	-9.47E+03	1.87E+04	92	543.	119
L3	-9.47E+03	1.86E+04	90	543.	119
L4	-1.68E+04	1.35E+04	79	2.11E+03	151
NF	—	—	—	—	—
NS	-6.37E+03	9.00E+03	135	1.74E+03	-129

Table G–1758. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.19E+04	1.14E+04	-1.15E+04	1.10E+04
A2	-1.19E+04	1.14E+04	-1.15E+04	1.10E+04
FD	-7.28E+03	7.27E+03	-7.05E+03	7.03E+03
L1	-2.77E+04	9.73E+03	-2.75E+04	9.50E+03
L3	-2.77E+04	9.69E+03	-2.75E+04	9.46E+03
L4	-3.35E+04	1.77E+03	-3.20E+04	-195.
NF	—	—	—	—
NS	-1.66E+04	4.93E+03	-1.59E+04	4.36E+03

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–880. Time history of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1759. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN)	a_1 (kN)	Φ_1 (deg)	a_2 (kN)	Φ_2 (deg)
A1	-186.	1.74E+04	97	280.	-71
A2	-186.	1.74E+04	97	280.	-71
FD	-12.7	1.09E+04	72	14.5	35
L1	-1.66E+04	2.80E+04	92	1.21E+03	119
L3	-1.66E+04	2.80E+04	90	1.20E+03	119
L4	-2.45E+04	1.56E+04	84	4.27E+03	-179
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1760. Minimum and maximum of of F_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

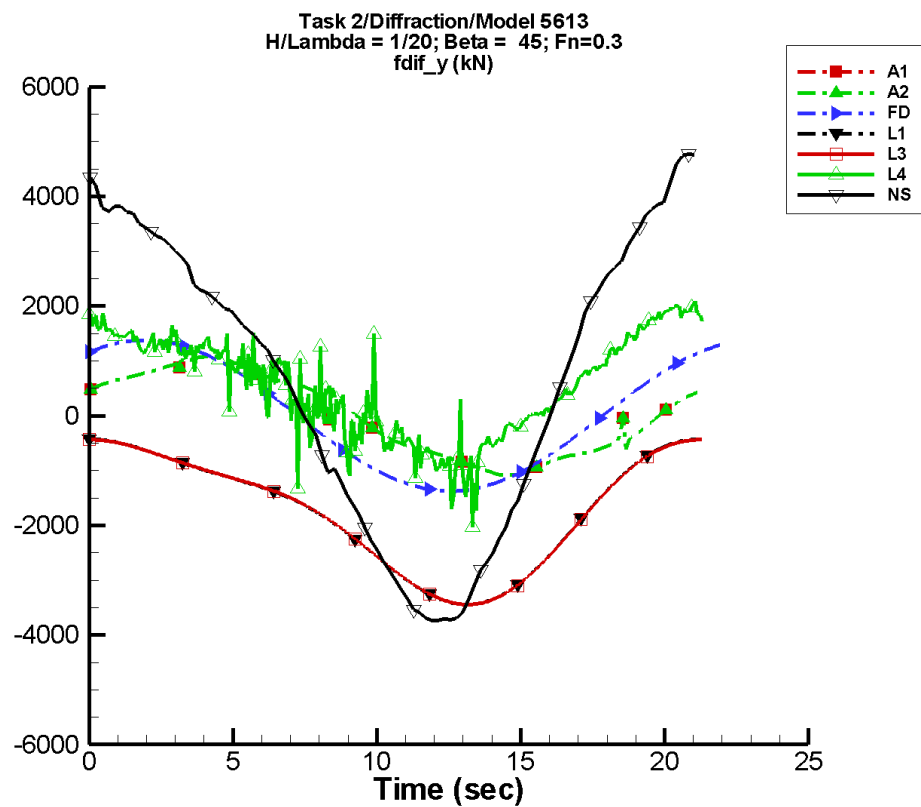| Code	Unfiltered Minimum (kN)	Maximum (kN)	Filtered Minimum (kN)	Maximum (kN)
A1	-1.79E+04	1.70E+04	-1.73E+04	1.65E+04
A2	-1.79E+04	1.70E+04	-1.73E+04	1.65E+04
FD	-1.09E+04	1.09E+04	-1.06E+04	1.05E+04
L1	-4.36E+04	1.25E+04	-4.33E+04	1.22E+04
L3	-4.36E+04	1.25E+04	-4.33E+04	1.21E+04
L4	-6.43E+04	-2.97E+03	-4.95E+04	-7.07E+03
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–881. Time history of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
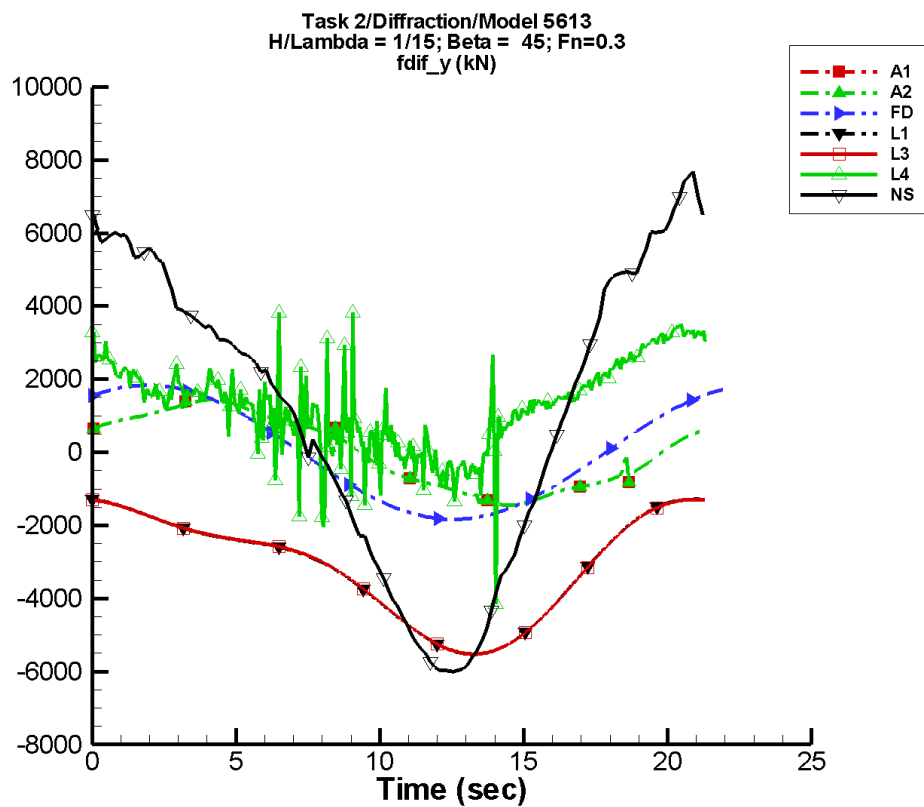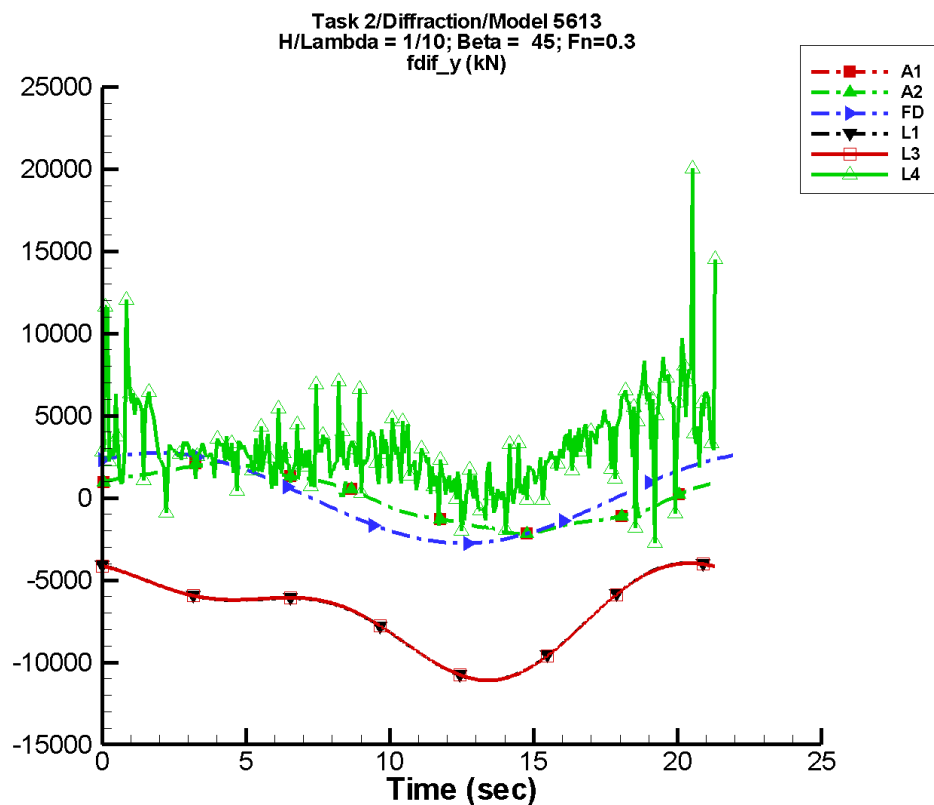
Table G–1761. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	6.79E-04	9.84E-02	169	7.11E-04	24
A2	6.79E-04	9.84E-02	169	7.11E-04	24
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	9.24E-05	1.09E-03	-37	2.26E-03	106

Table G–1762. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.107	0.106	-0.105	0.104
A2	-0.107	0.106	-0.105	0.104
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.26E-02	1.49E-02	-5.19E-03	5.14E-03

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–882. Time history of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
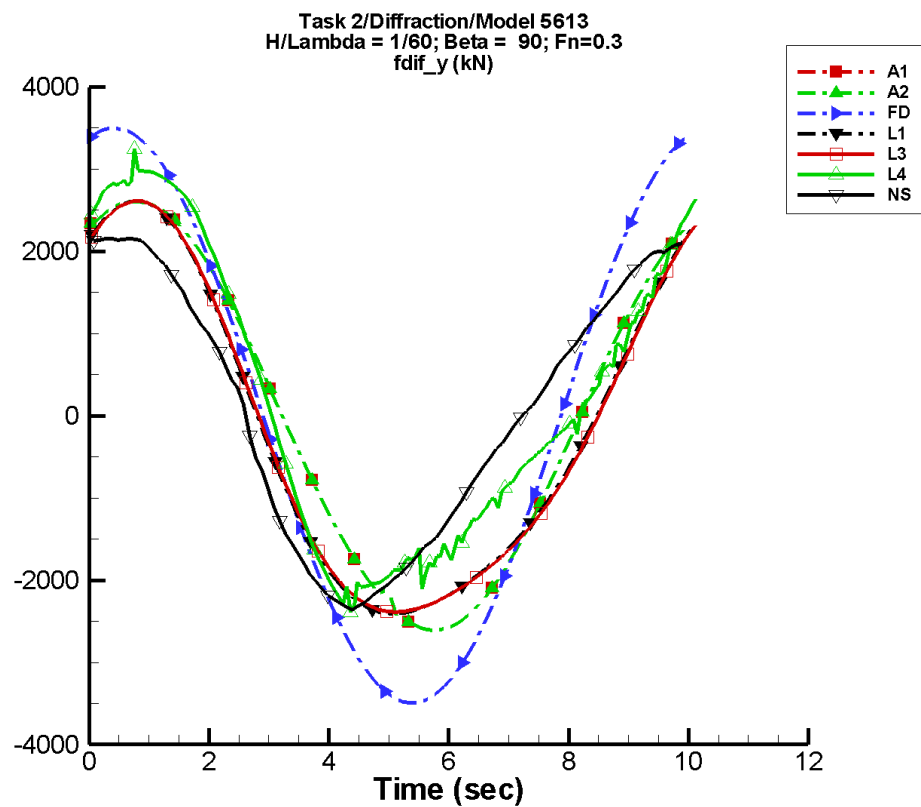
Table G–1763. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.04E-03	0.296	169	2.14E-03	24
A2	2.04E-03	0.296	169	2.14E-03	24
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	1.48E-03	1.17E-03	81	6.33E-03	52

Table G–1764. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.321	0.318	-0.316	0.313
A2	-0.321	0.318	-0.316	0.313
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-5.85E-02	4.96E-02	-1.75E-02	2.98E-02

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–883. Time history of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1765. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
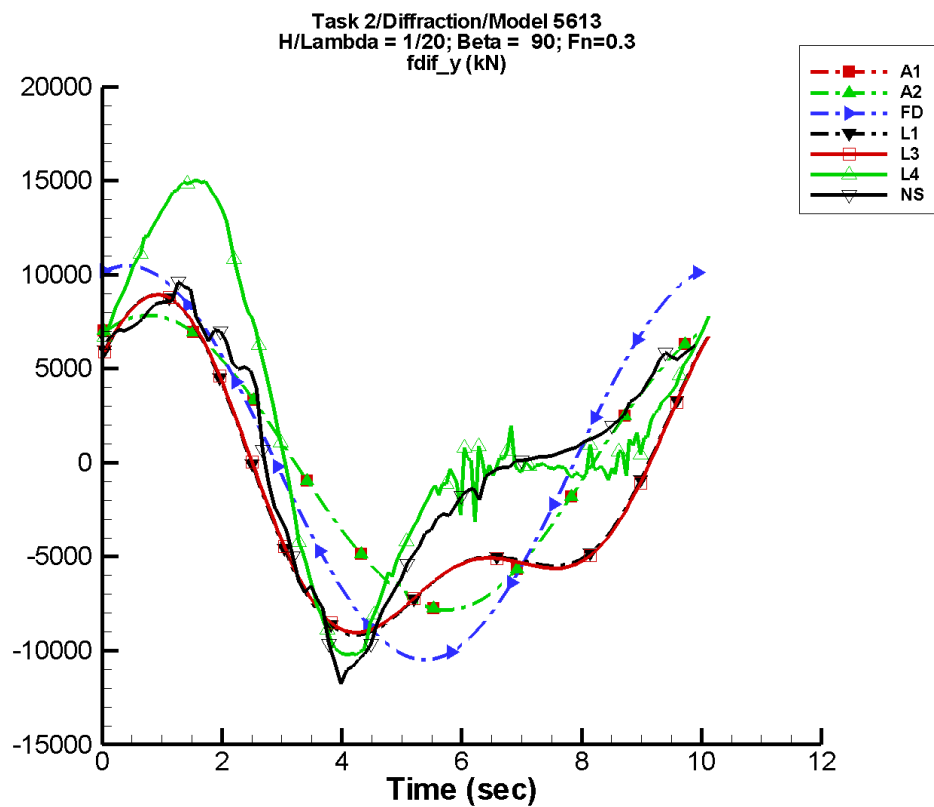
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.73E-03	0.395	169	2.85E-03	24
A2	2.73E-03	0.395	169	2.85E-03	24
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	2.33E-03	2.67E-03	-138	4.71E-03	-57

Table G–1766. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.428	0.424	-0.422	0.418
A2	-0.428	0.424	-0.422	0.418
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-9.27E-02	7.42E-02	-8.85E-03	3.68E-02

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, NFA and NSHIPMO.

Figure G–884. Time history of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
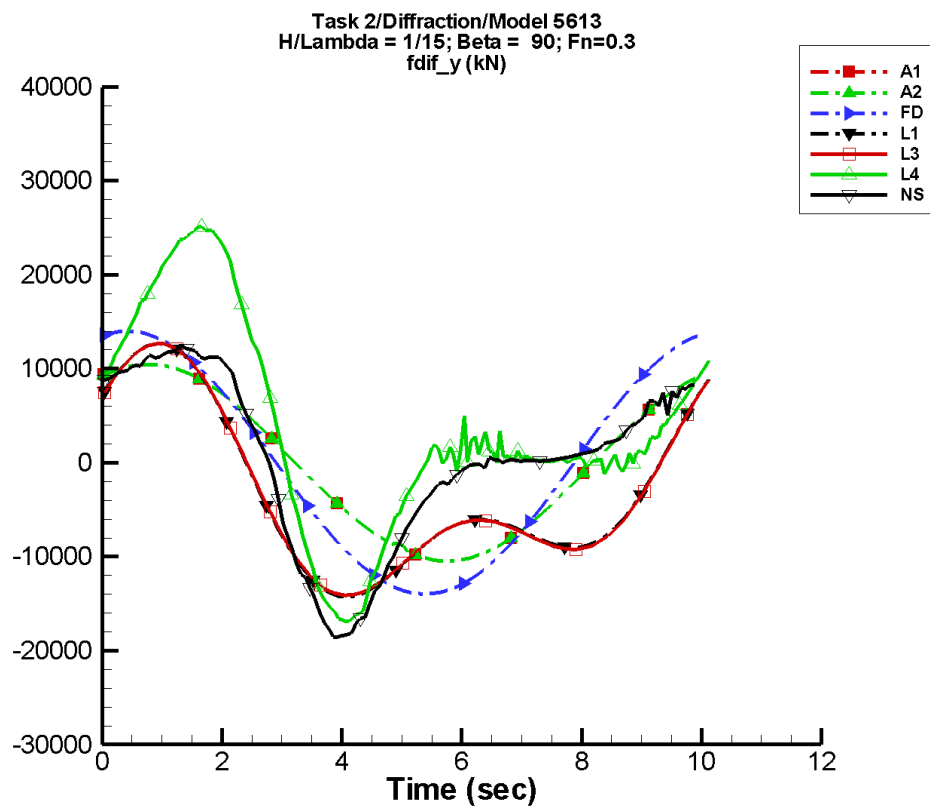
Table G–1767. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	4.09E-03	0.593	169	4.28E-03	24
A2	4.09E-03	0.593	169	4.28E-03	24
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1768. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.643	0.637	-0.634	0.627
A2	-0.643	0.637	-0.634	0.627
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–885. Time history of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
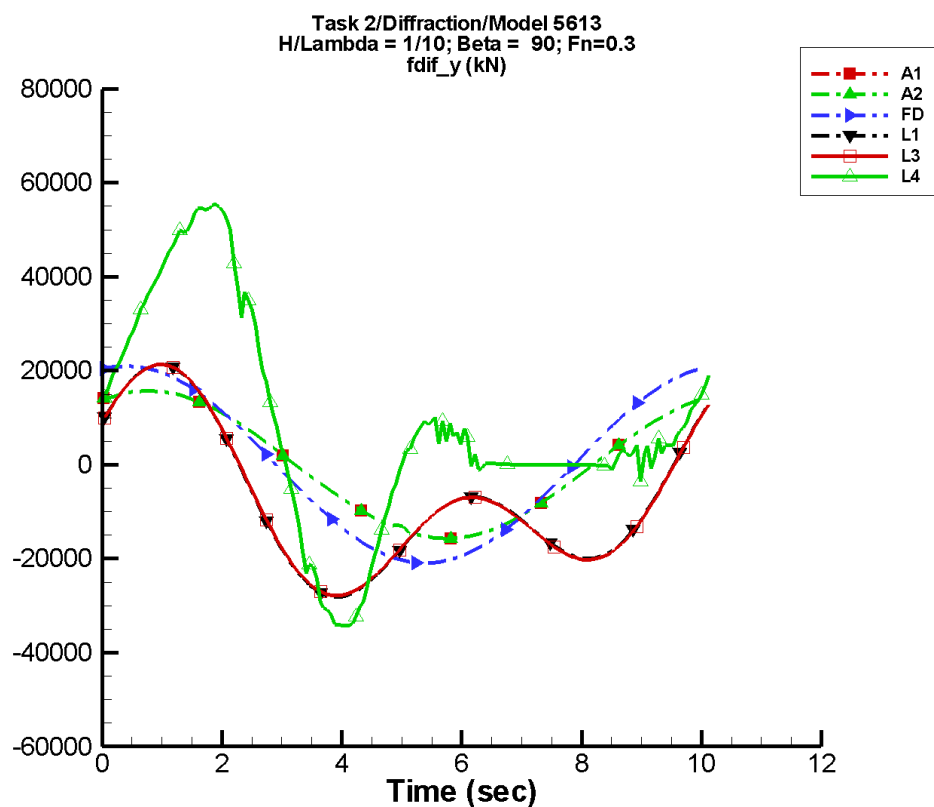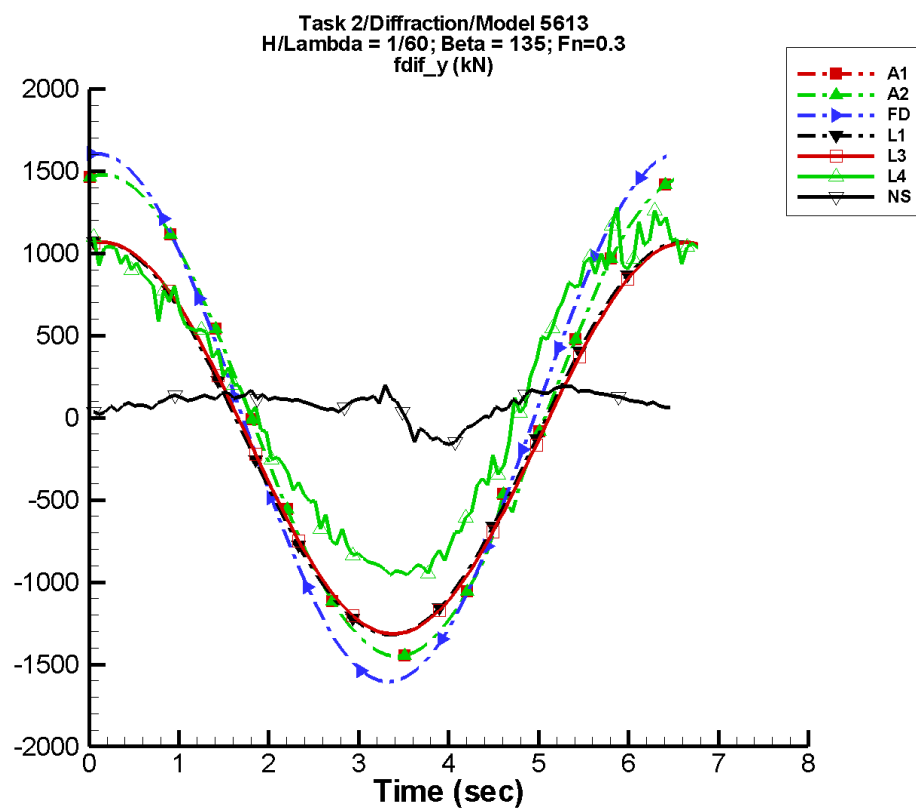
Table G–1769. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	0.500	3.60E+03	-86	3.75	-168
A2	0.500	3.60E+03	-86	3.75	-168
FD	1.88	4.89E+03	-91	2.23	-56
L1	539.	4.18E+03	-89	440.	-115
L3	539.	4.18E+03	-90	440.	-115
L4	359.	4.04E+03	-86	484.	-140
NF	—	—	—	—	—
NS	50.4	3.08E+03	-66	206.	47

Table G–1770. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.59E+03	3.58E+03	-3.53E+03	3.51E+03
A2	-3.59E+03	3.58E+03	-3.53E+03	3.51E+03
FD	-4.89E+03	4.89E+03	-4.84E+03	4.84E+03
L1	-4.06E+03	4.36E+03	-4.06E+03	4.35E+03
L3	-4.06E+03	4.34E+03	-4.07E+03	4.33E+03
L4	-4.63E+03	4.50E+03	-4.21E+03	4.19E+03
NF	—	—	—	—
NS	-3.55E+03	3.53E+03	-3.36E+03	3.28E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 45; Fn=0.0
fdif_mx (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–886. Time history of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1771. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
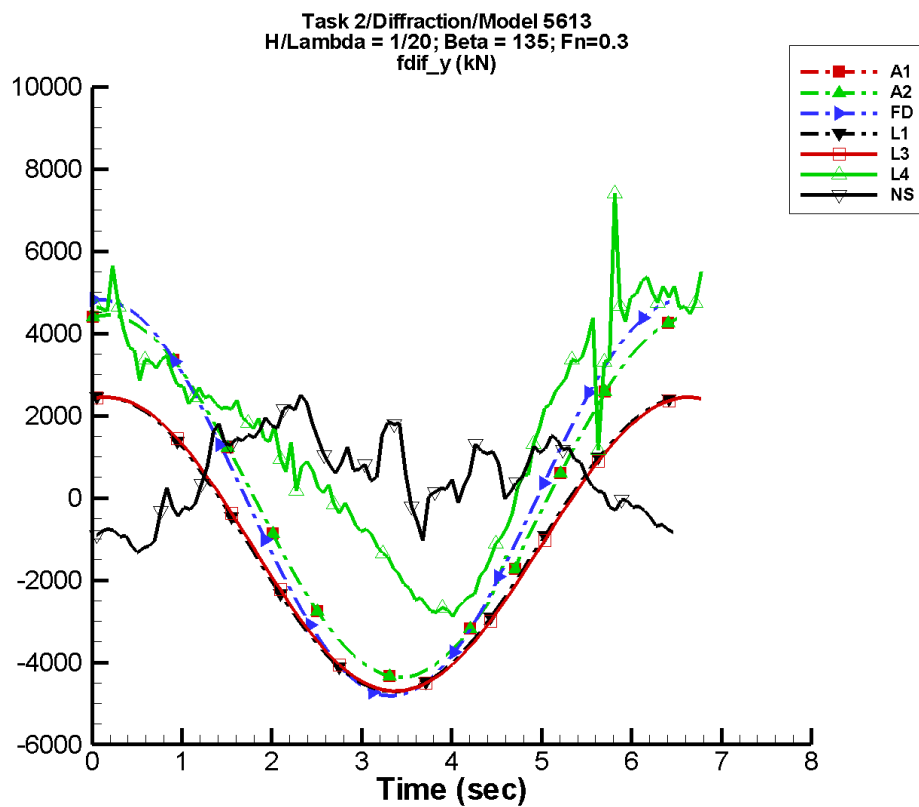
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.50	1.08E+04	-86	11.3	-168
A2	1.50	1.08E+04	-86	11.3	-168
FD	5.66	1.47E+04	-91	6.69	-56
L1	4.84E+03	1.25E+04	-89	3.96E+03	-115
L3	4.84E+03	1.25E+04	-90	3.96E+03	-115
L4	2.10E+03	1.20E+04	-82	3.92E+03	-151
NF	—	—	—	—	—
NS	-355.	9.09E+03	-59	1.47E+03	66

Table G–1772. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.08E+04	1.08E+04	-1.06E+04	1.06E+04
A2	-1.08E+04	1.08E+04	-1.06E+04	1.06E+04
FD	-1.47E+04	1.47E+04	-1.45E+04	1.45E+04
L1	-1.15E+04	1.56E+04	-1.15E+04	1.55E+04
L3	-1.15E+04	1.54E+04	-1.16E+04	1.54E+04
L4	-1.37E+04	1.70E+04	-1.24E+04	1.54E+04
NF	—	—	—	—
NS	-1.26E+04	1.02E+04	-9.92E+03	9.59E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–887. Time history of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
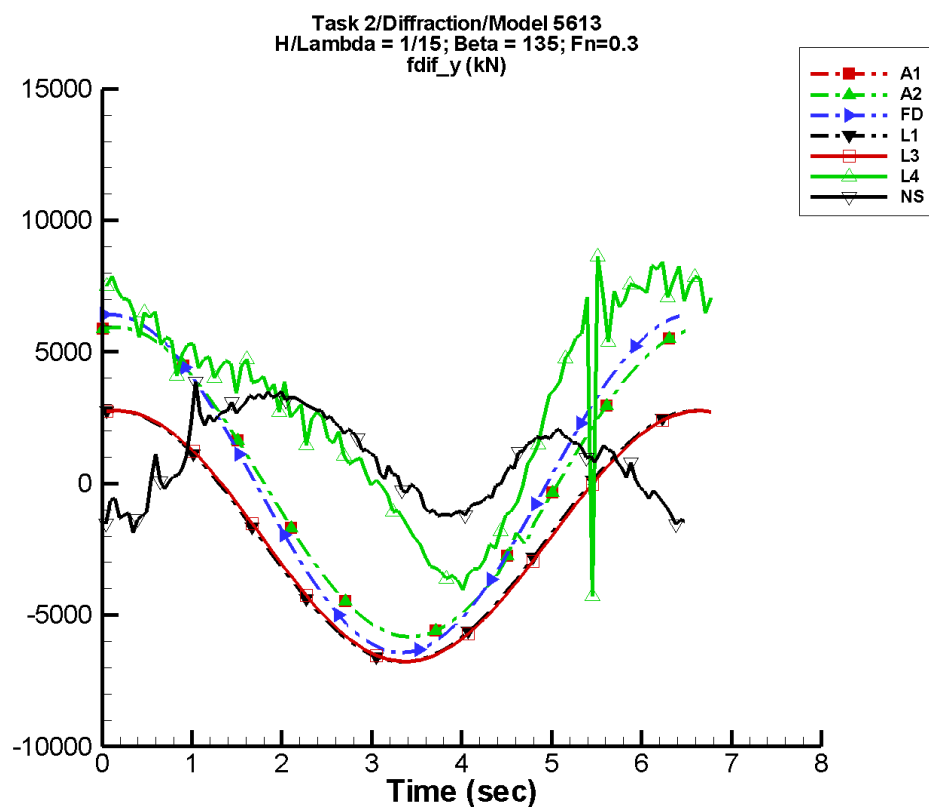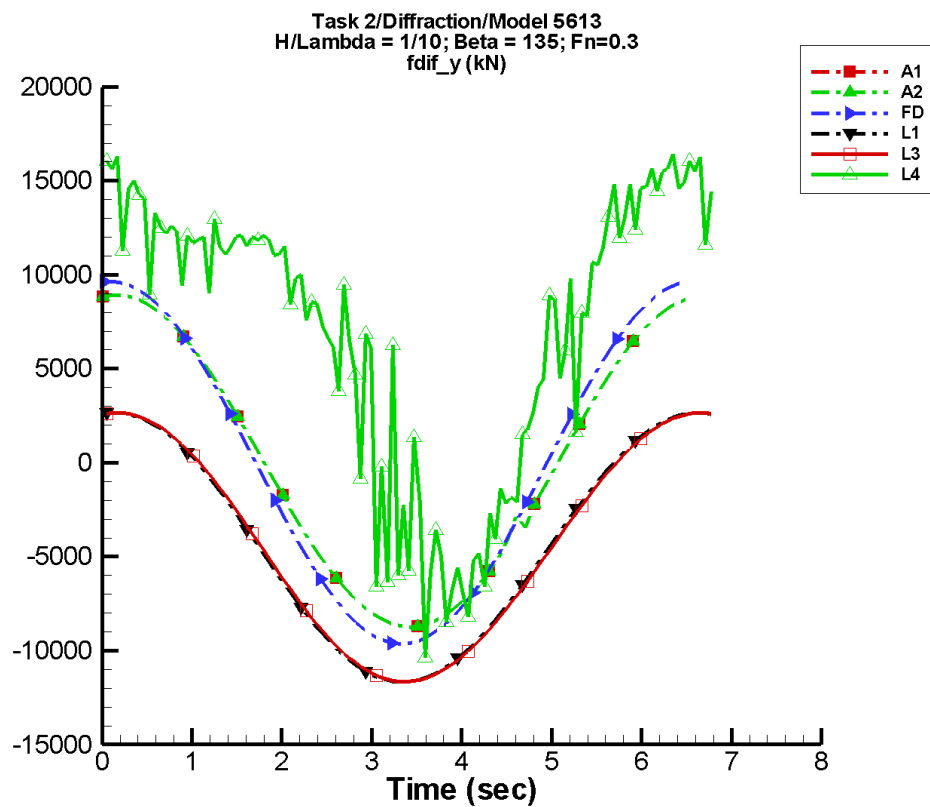
Table G–1773. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.01	1.45E+04	-86	15.1	-168
A2	2.01	1.45E+04	-86	15.1	-168
FD	7.54	1.96E+04	-91	8.92	-56
L1	8.61E+03	1.67E+04	-89	7.04E+03	-115
L3	8.61E+03	1.67E+04	-90	7.04E+03	-115
L4	-239.	1.72E+04	-70	5.67E+03	-169
NF	—	—	—	—	—
NS	-1.89E+03	1.23E+04	-74	1.80E+03	99

Table G–1774. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.44E+04	1.44E+04	-1.42E+04	1.41E+04
A2	-1.44E+04	1.44E+04	-1.42E+04	1.41E+04
FD	-1.95E+04	1.96E+04	-1.94E+04	1.94E+04
L1	-1.49E+04	2.36E+04	-1.50E+04	2.35E+04
L3	-1.49E+04	2.34E+04	-1.50E+04	2.33E+04
L4	-2.15E+04	2.49E+04	-1.75E+04	2.16E+04
NF	—	—	—	—
NS	-3.76E+04	1.28E+04	-1.30E+04	1.21E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–888. Time history of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
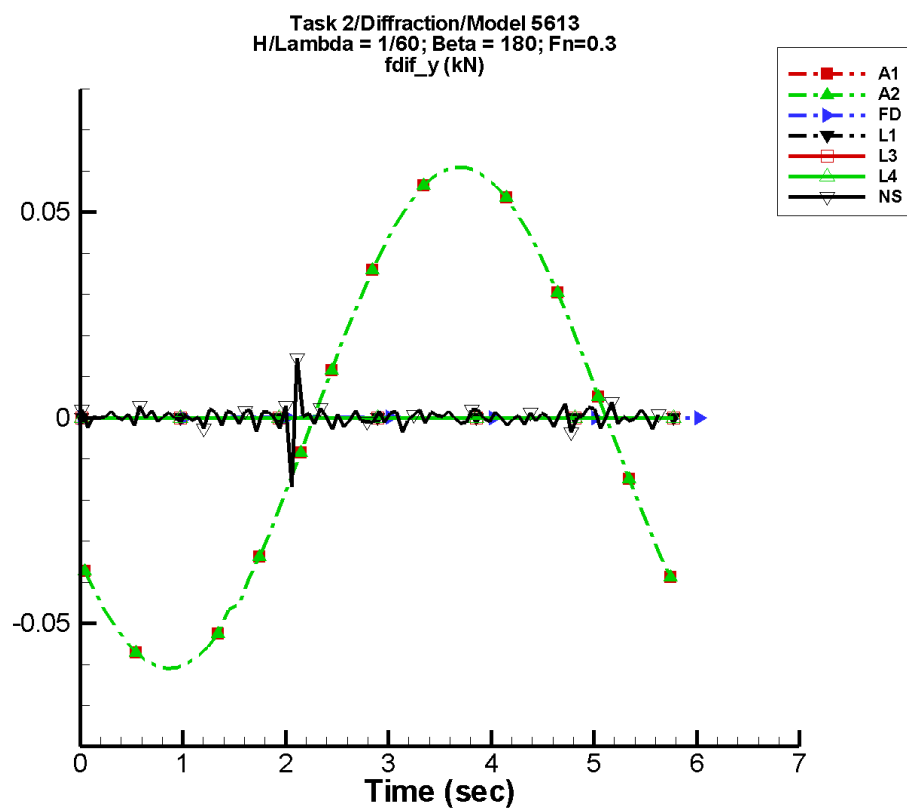
Table G–1775. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	3.01	2.17E+04	-86	22.6	-168
A2	3.01	2.17E+04	-86	22.6	-168
FD	11.3	2.93E+04	-91	13.4	-56
L1	1.94E+04	2.51E+04	-89	1.59E+04	-115
L3	1.94E+04	2.51E+04	-90	1.59E+04	-115
L4	-9.48E+03	2.95E+04	-77	1.41E+04	-168
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1776. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.16E+04	2.16E+04	-2.13E+04	2.11E+04
A2	-2.16E+04	2.16E+04	-2.13E+04	2.11E+04
FD	-2.93E+04	2.93E+04	-2.90E+04	2.90E+04
L1	-2.11E+04	4.53E+04	-2.12E+04	4.51E+04
L3	-2.12E+04	4.49E+04	-2.12E+04	4.47E+04
L4	-6.33E+04	3.83E+04	-4.48E+04	3.27E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–889. Time history of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
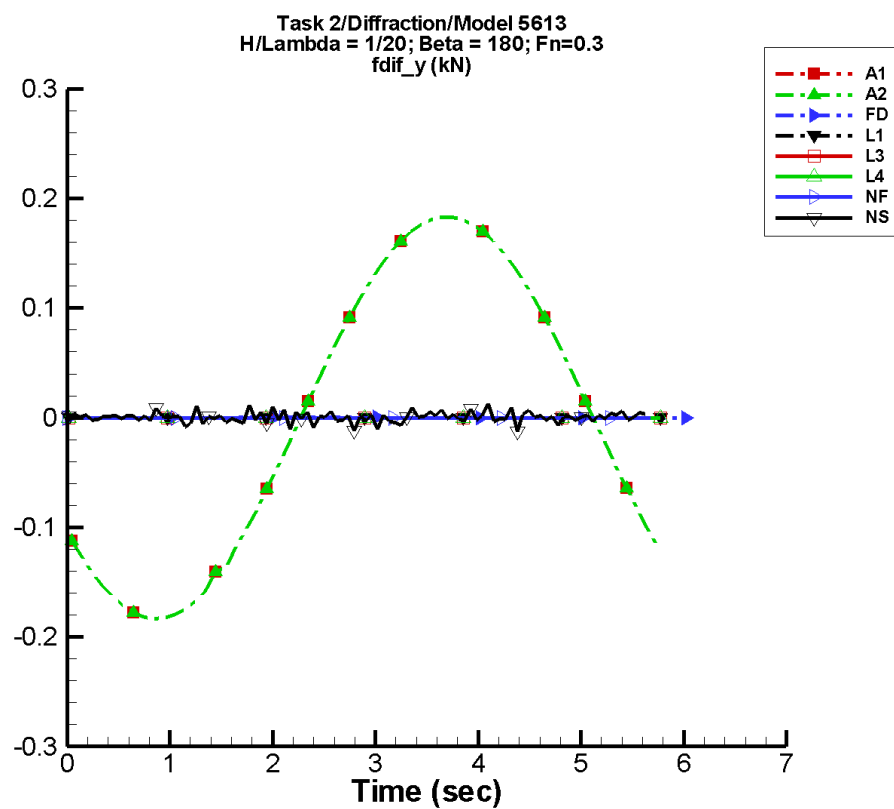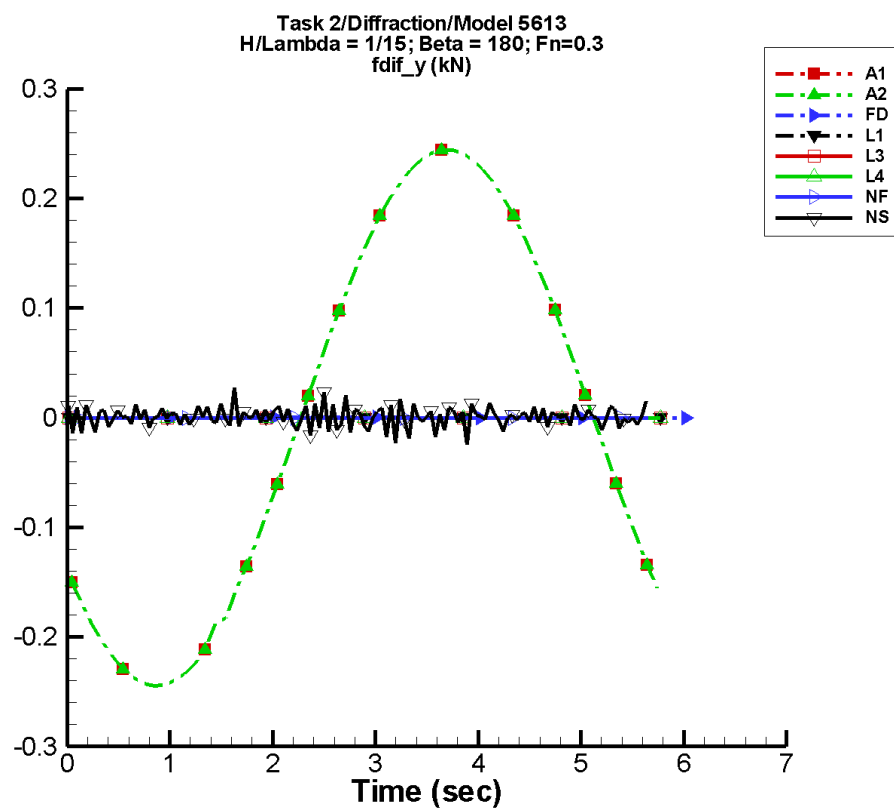
Table G–1777. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	4.30	5.18E+03	-118	6.49	164
A2	4.30	5.18E+03	-118	6.49	164
FD	1.18	5.64E+03	-121	2.41	-86
L1	1.39E+03	6.06E+03	-109	1.84E+03	-146
L3	1.39E+03	6.06E+03	-110	1.84E+03	-146
L4	713.	5.41E+03	-100	1.40E+03	-175
NF	—	—	—	—	—
NS	38.5	4.21E+03	-101	926.	112

Table G–1778. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-5.18E+03	5.18E+03	-5.12E+03	5.13E+03
A2	-5.18E+03	5.18E+03	-5.12E+03	5.13E+03
FD	-5.64E+03	5.64E+03	-5.58E+03	5.58E+03
L1	-6.47E+03	6.31E+03	-6.42E+03	6.29E+03
L3	-6.48E+03	6.24E+03	-6.43E+03	6.22E+03
L4	-6.19E+03	8.89E+03	-5.31E+03	7.87E+03
NF	—	—	—	—
NS	-3.69E+03	5.31E+03	-3.57E+03	5.02E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–890. Time history of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
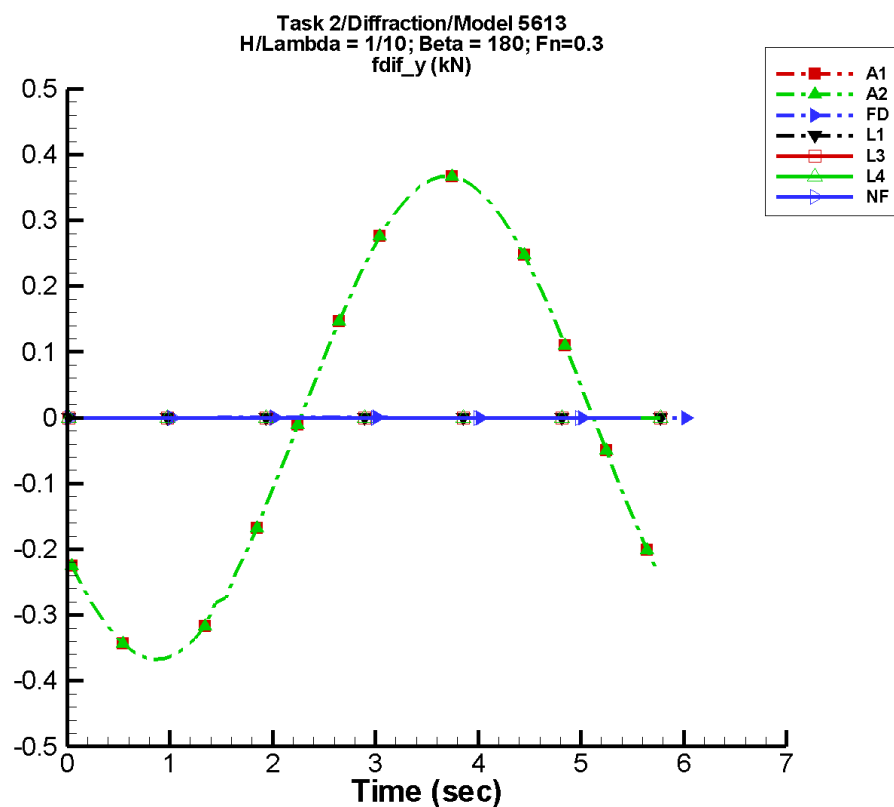
Table G–1779. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	12.9	1.56E+04	-118	19.5	164
A2	12.9	1.56E+04	-118	19.5	164
FD	3.55	1.69E+04	-121	7.23	-86
L1	1.25E+04	1.82E+04	-109	1.65E+04	-146
L3	1.25E+04	1.82E+04	-110	1.65E+04	-146
L4	4.48E+03	1.85E+04	-99	1.18E+04	-180
NF	—	—	—	—	—
NS	-613.	1.32E+04	-96	6.95E+03	111

Table G–1780. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.56E+04	1.56E+04	-1.54E+04	1.54E+04
A2	-1.56E+04	1.56E+04	-1.54E+04	1.54E+04
FD	-1.69E+04	1.69E+04	-1.67E+04	1.67E+04
L1	-2.21E+04	3.43E+04	-2.18E+04	3.40E+04
L3	-2.21E+04	3.40E+04	-2.18E+04	3.37E+04
L4	-2.58E+04	3.91E+04	-2.31E+04	3.73E+04
NF	—	—	—	—
NS	-2.24E+04	2.56E+04	-1.53E+04	2.25E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–891. Time history of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
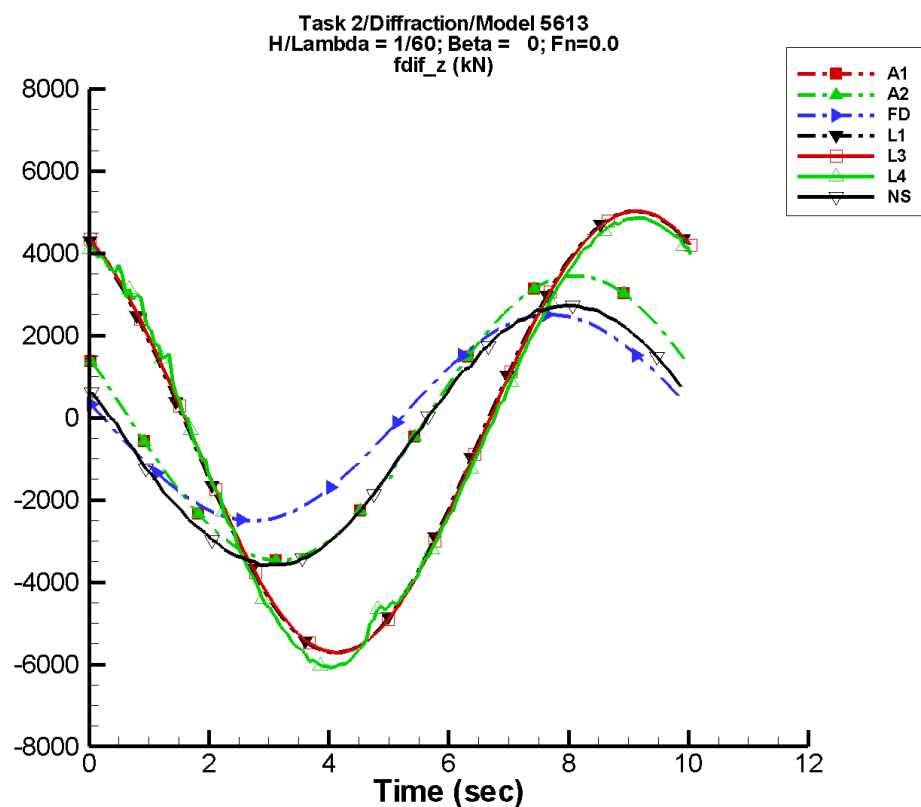
Table G–1781. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	17.3	2.08E+04	-118	26.1	164
A2	17.3	2.08E+04	-118	26.1	164
FD	4.74	2.25E+04	-121	9.64	-86
L1	2.22E+04	2.42E+04	-109	2.94E+04	-146
L3	2.22E+04	2.42E+04	-110	2.94E+04	-146
L4	-531.	2.63E+04	-87	2.57E+04	164
NF	—	—	—	—	—
NS	-2.39E+03	1.69E+04	-103	1.26E+04	104

Table G–1782. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

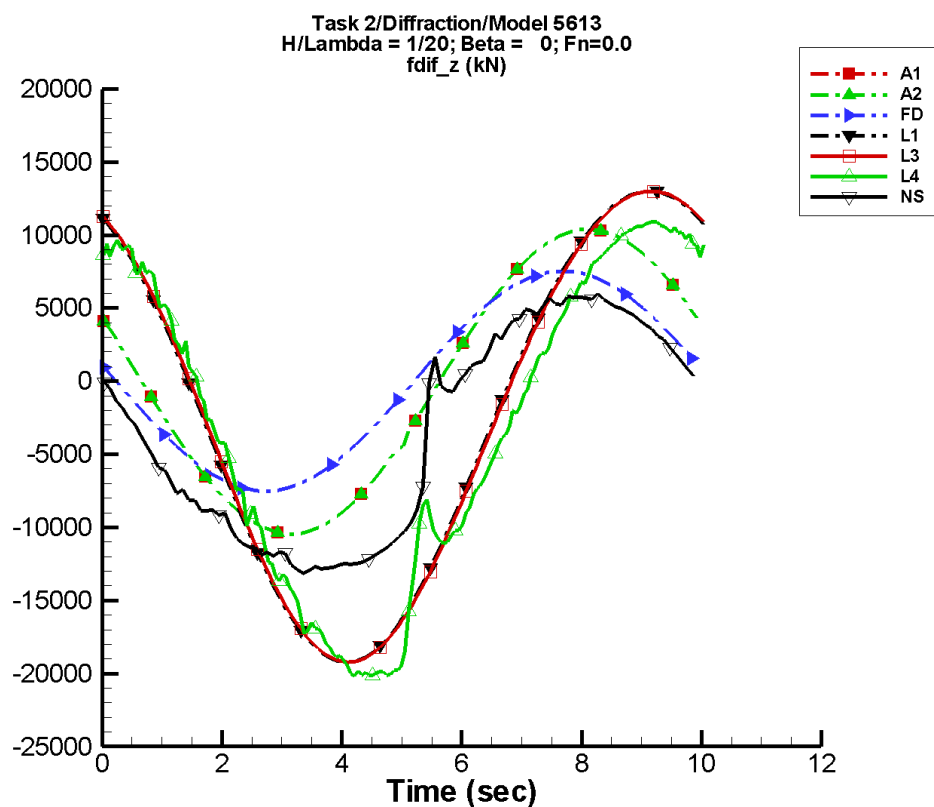| Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.08E+04	2.08E+04	-2.06E+04	2.06E+04
A2	-2.08E+04	2.08E+04	-2.06E+04	2.06E+04
FD	-2.25E+04	2.25E+04	-2.23E+04	2.23E+04
L1	-3.12E+04	5.79E+04	-3.07E+04	5.74E+04
L3	-3.13E+04	5.74E+04	-3.08E+04	5.70E+04
L4	-4.95E+04	6.61E+04	-4.45E+04	5.85E+04
NF	—	—	—	—
NS	-3.10E+04	3.55E+04	-2.64E+04	3.02E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–892. Time history of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
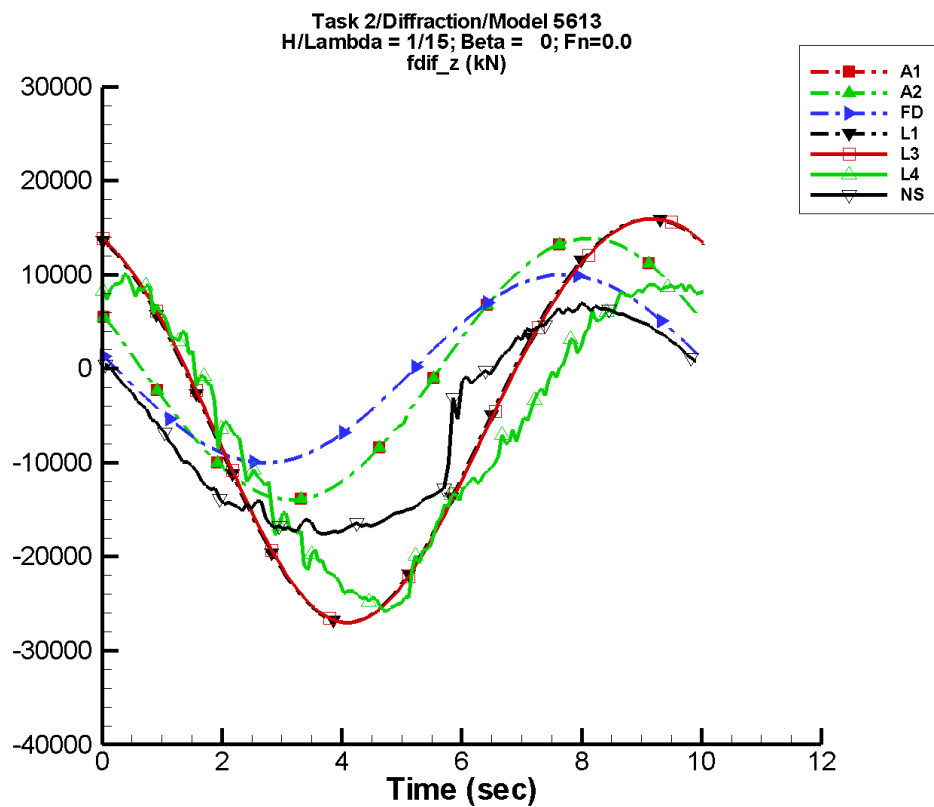
Table G–1783. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	25.9	3.12E+04	-118	39.1	164
A2	25.9	3.12E+04	-118	39.1	164
FD	7.10	3.38E+04	-121	14.5	-86
L1	5.00E+04	3.63E+04	-109	6.62E+04	-146
L3	5.00E+04	3.63E+04	-110	6.62E+04	-146
L4	-2.36E+04	6.05E+04	-117	8.32E+04	157
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1784. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.12E+04	3.12E+04	-3.08E+04	3.09E+04
A2	-3.12E+04	3.12E+04	-3.08E+04	3.09E+04
FD	-3.38E+04	3.38E+04	-3.35E+04	3.35E+04
L1	-5.22E+04	1.24E+05	-5.12E+04	1.23E+05
L3	-5.22E+04	1.24E+05	-5.12E+04	1.23E+05
L4	-1.81E+05	1.66E+05	-1.62E+05	1.19E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–893. Time history of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
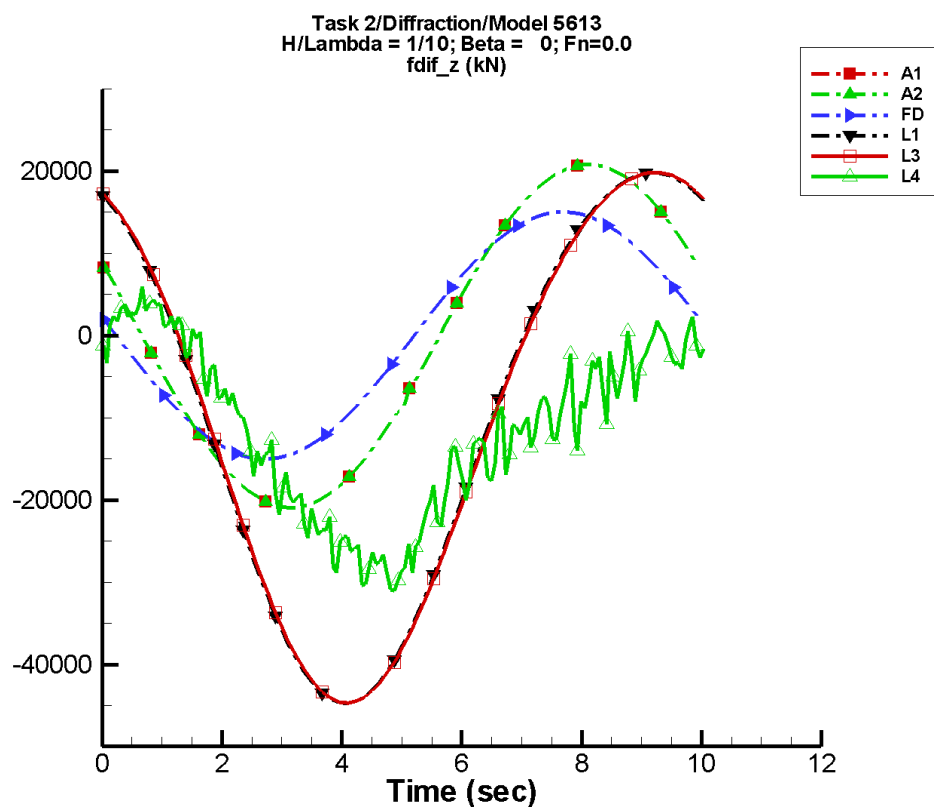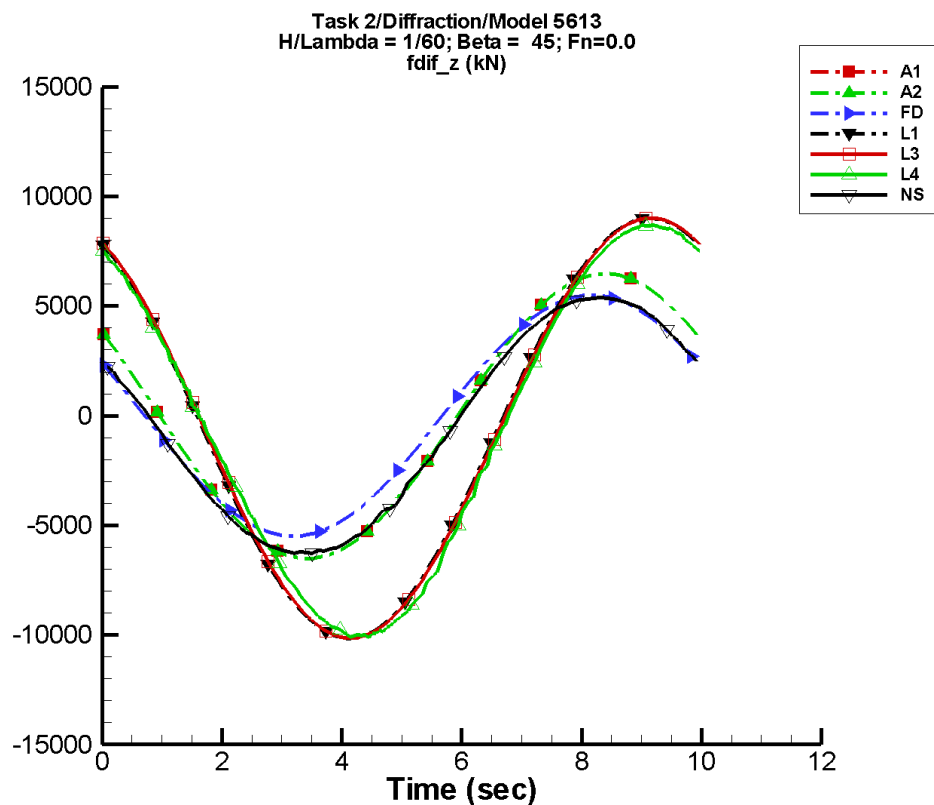
Table G–1785. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	6.02	4.20E+03	-130	5.22	132
A2	6.02	4.20E+03	-130	5.22	132
FD	0.278	5.19E+03	-141	2.16	-108
L1	833.	4.28E+03	-122	419.	-141
L3	833.	4.28E+03	-123	419.	-141
L4	685.	4.29E+03	-124	305.	-150
NF	—	—	—	—	—
NS	36.2	3.47E+03	-133	159.	6

Table G–1786. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.18E+03	4.18E+03	-4.14E+03	4.14E+03
A2	-4.18E+03	4.18E+03	-4.14E+03	4.14E+03
FD	-5.19E+03	5.19E+03	-5.14E+03	5.14E+03
L1	-3.86E+03	4.71E+03	-3.84E+03	4.70E+03
L3	-3.85E+03	4.72E+03	-3.84E+03	4.71E+03
L4	-4.32E+03	5.35E+03	-4.01E+03	4.74E+03
NF	—	—	—	—
NS	-3.48E+03	4.13E+03	-3.41E+03	4.00E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–894. Time history of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1787. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
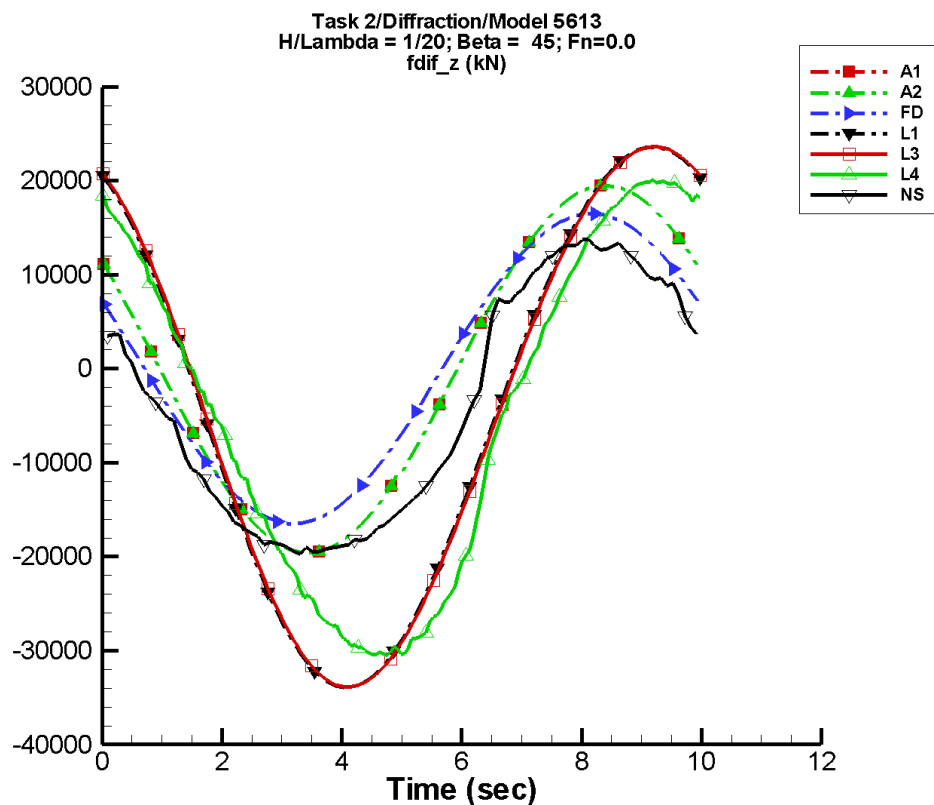
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	18.1	1.26E+04	-130	15.7	132
A2	18.1	1.26E+04	-130	15.7	132
FD	0.837	1.56E+04	-141	6.47	-108
L1	7.48E+03	1.28E+04	-122	3.75E+03	-141
L3	7.48E+03	1.28E+04	-123	3.75E+03	-141
L4	3.60E+03	1.55E+04	-123	3.27E+03	-151
NF	—	—	—	—	—
NS	-438.	1.14E+04	-130	1.49E+03	33

Table G–1788. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.26E+04	1.26E+04	-1.25E+04	1.24E+04
A2	-1.26E+04	1.26E+04	-1.25E+04	1.24E+04
FD	-1.56E+04	1.56E+04	-1.54E+04	1.54E+04
L1	-9.07E+03	1.75E+04	-8.98E+03	1.75E+04
L3	-9.05E+03	1.77E+04	-8.96E+03	1.76E+04
L4	-1.73E+04	1.98E+04	-1.53E+04	1.72E+04
NF	—	—	—	—
NS	-1.76E+04	1.54E+04	-1.14E+04	1.36E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–895. Time history of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
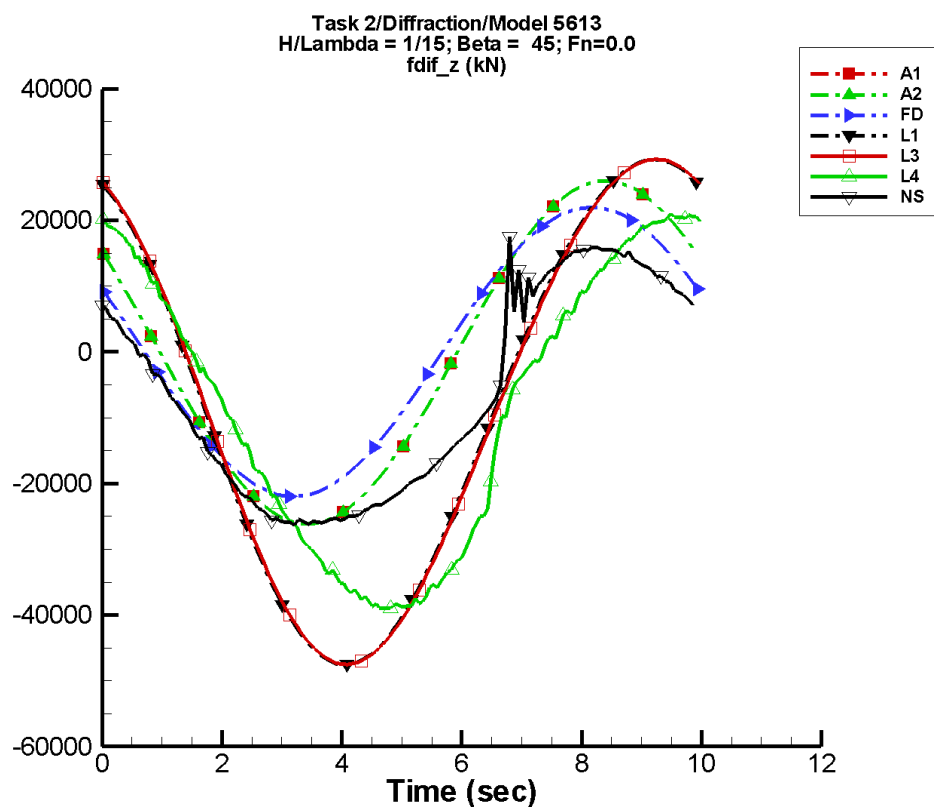
Table G–1789. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	24.2	1.69E+04	-130	21.0	132
A2	24.2	1.69E+04	-130	21.0	132
FD	1.11	2.08E+04	-141	8.63	-108
L1	1.33E+04	1.71E+04	-122	6.65E+03	-141
L3	1.33E+04	1.71E+04	-123	6.65E+03	-141
L4	1.81E+03	2.21E+04	-115	4.83E+03	-176
NF	—	—	—	—	—
NS	-1.98E+03	1.57E+04	-121	2.27E+03	64

Table G–1790. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.68E+04	1.68E+04	-1.66E+04	1.66E+04
A2	-1.68E+04	1.68E+04	-1.66E+04	1.66E+04
FD	-2.08E+04	2.08E+04	-2.06E+04	2.05E+04
L1	-1.04E+04	2.69E+04	-1.03E+04	2.68E+04
L3	-1.04E+04	2.71E+04	-1.03E+04	2.70E+04
L4	-2.76E+04	2.14E+04	-2.51E+04	1.98E+04
NF	—	—	—	—
NS	-3.16E+04	1.76E+04	-1.89E+04	1.70E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–896. Time history of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
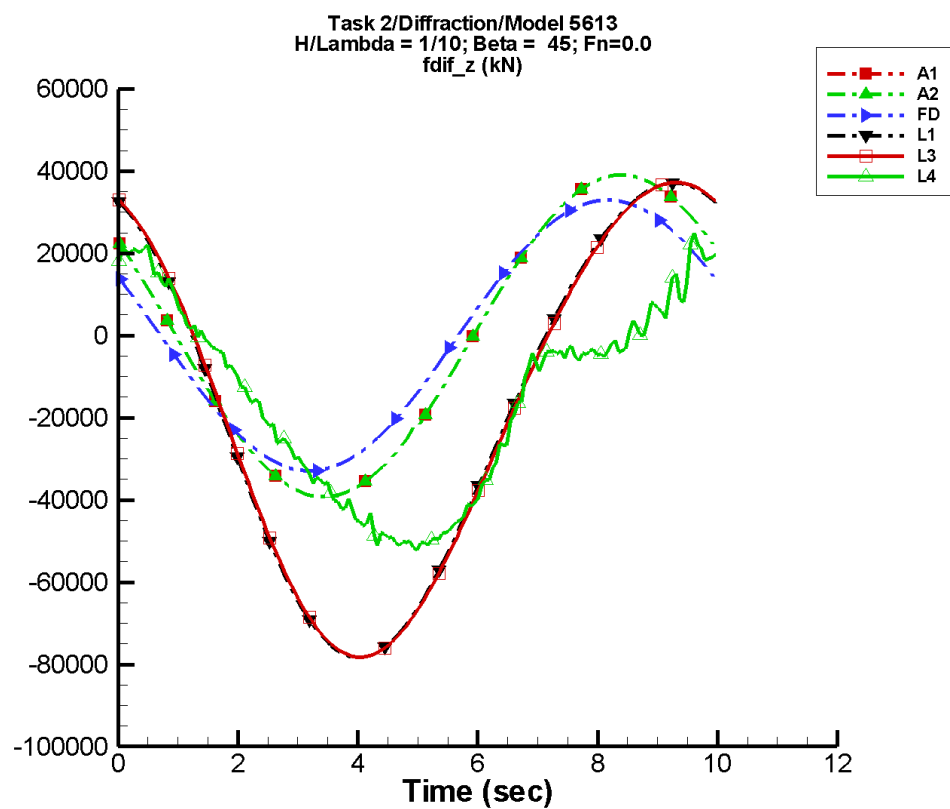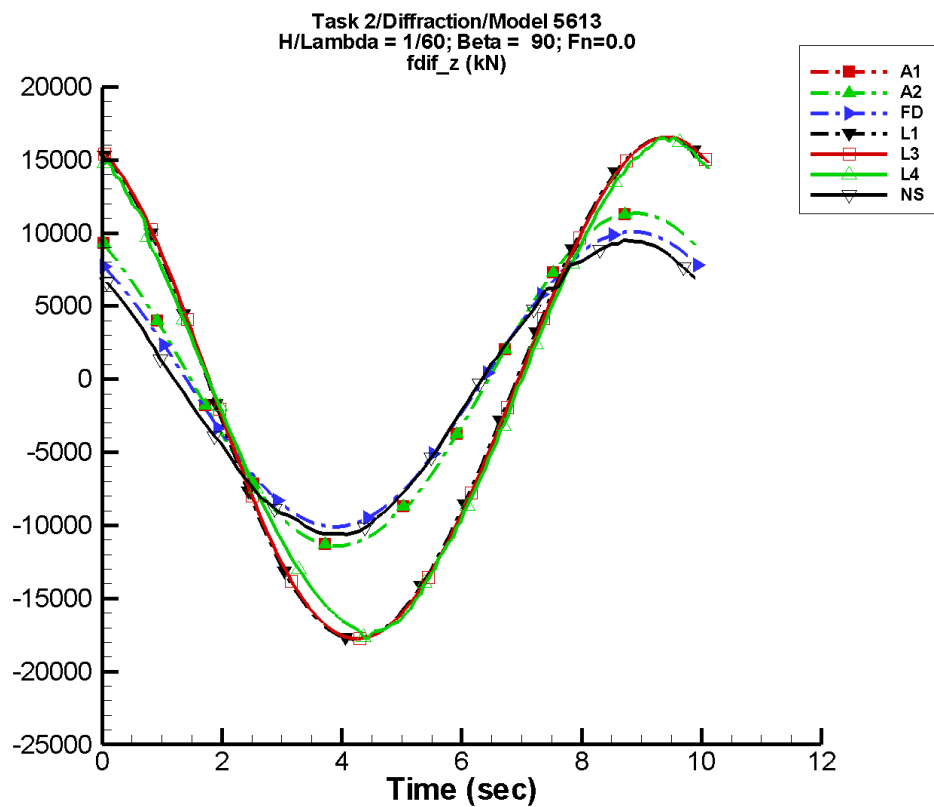
Table G–1791. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	36.2	2.53E+04	-130	31.5	132
A2	36.2	2.53E+04	-130	31.5	132
FD	1.67	3.11E+04	-141	12.9	-108
L1	2.99E+04	2.56E+04	-122	1.50E+04	-141
L3	2.99E+04	2.56E+04	-123	1.50E+04	-141
L4	-1.08E+04	3.81E+04	-127	1.60E+04	-144
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1792. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.52E+04	2.52E+04	-2.50E+04	2.49E+04
A2	-2.52E+04	2.52E+04	-2.50E+04	2.49E+04
FD	-3.11E+04	3.11E+04	-3.08E+04	3.08E+04
L1	-1.07E+04	5.29E+04	-1.04E+04	5.27E+04
L3	-1.06E+04	5.33E+04	-1.03E+04	5.31E+04
L4	-8.32E+04	1.14E+05	-6.36E+04	2.75E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–897. Time history of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
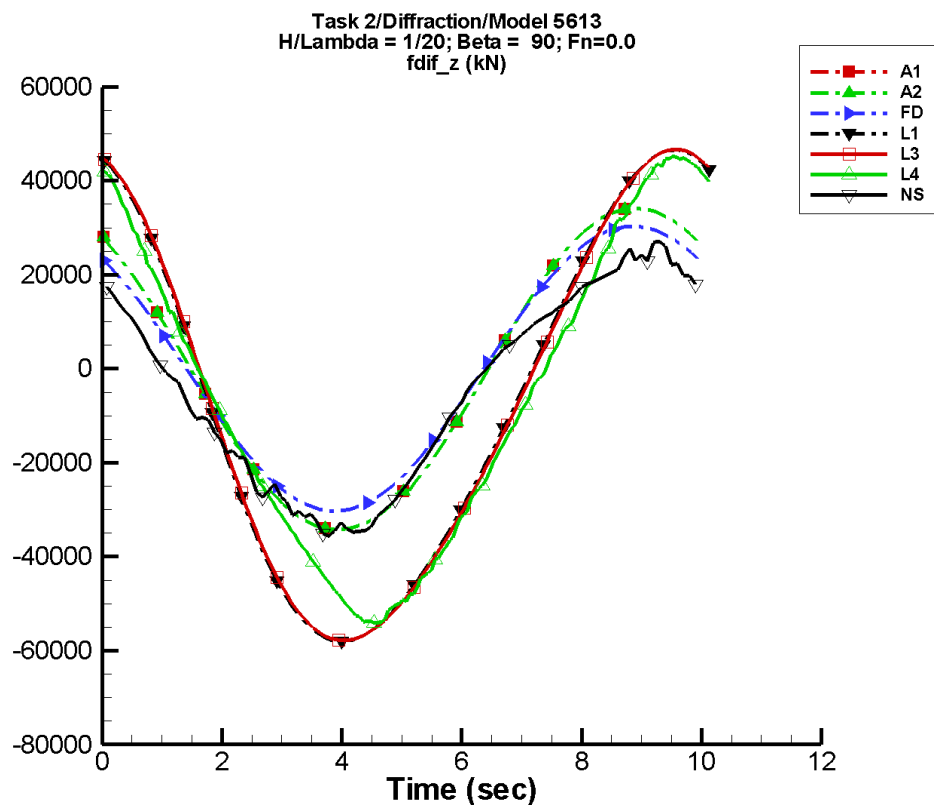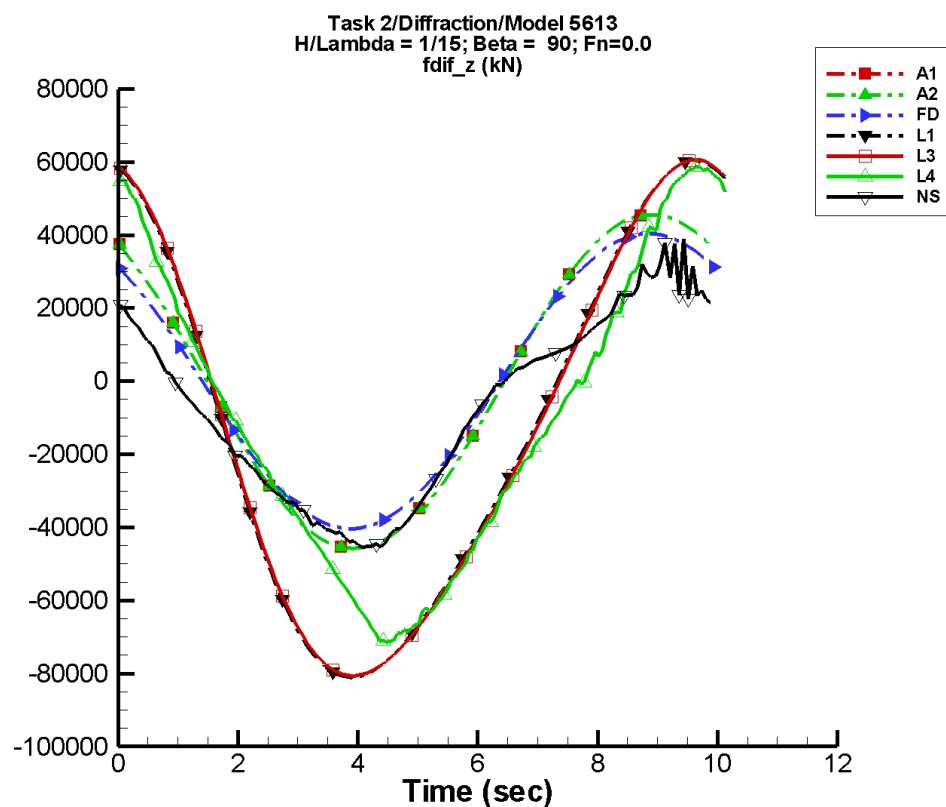
Table G–1793. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	5.75E-06	1.24E-02	16	2.39E-04	-179
A2	5.75E-06	1.24E-02	16	2.39E-04	-179
FD	-6.86E-08	5.25E-04	48	2.21E-07	83
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	1.18E-04	8.88E-04	-108	1.84E-03	123

Table G–1794. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.30E-02	1.34E-02	-1.28E-02	1.33E-02
A2	-1.30E-02	1.34E-02	-1.28E-02	1.33E-02
FD	-5.25E-04	5.25E-04	-5.20E-04	5.20E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.17E-02	9.52E-03	-2.81E-03	3.81E-03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 180; Fn=0.0
fdif_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–898. Time history of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
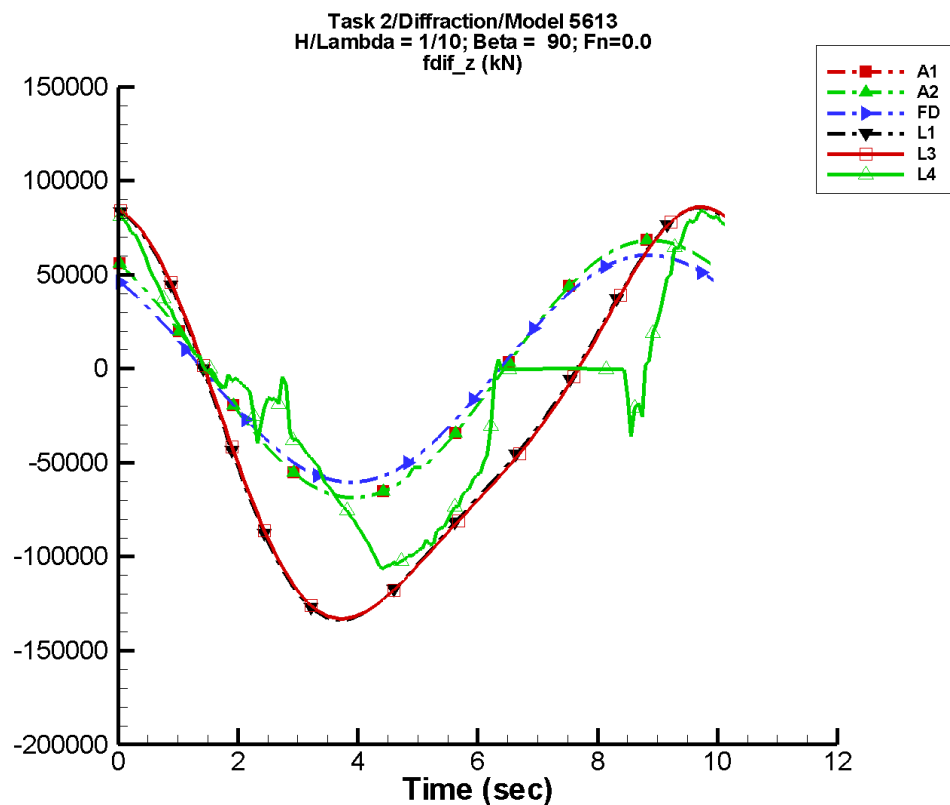
Table G–1795. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.73E-05	3.73E-02	16	7.19E-04	-179
A2	1.73E-05	3.73E-02	16	7.19E-04	-179
FD	-2.06E-07	1.58E-03	48	6.62E-07	83
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	7.80E-05	2.87E-03	-76	1.91E-03	148

Table G–1796. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.91E-02	4.04E-02	-3.85E-02	4.01E-02
A2	-3.91E-02	4.04E-02	-3.85E-02	4.01E-02
FD	-1.58E-03	1.58E-03	-1.56E-03	1.56E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-3.92E-02	6.94E-02	-2.57E-02	1.96E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 180; Fn=0.0
fdif_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–899. Time history of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
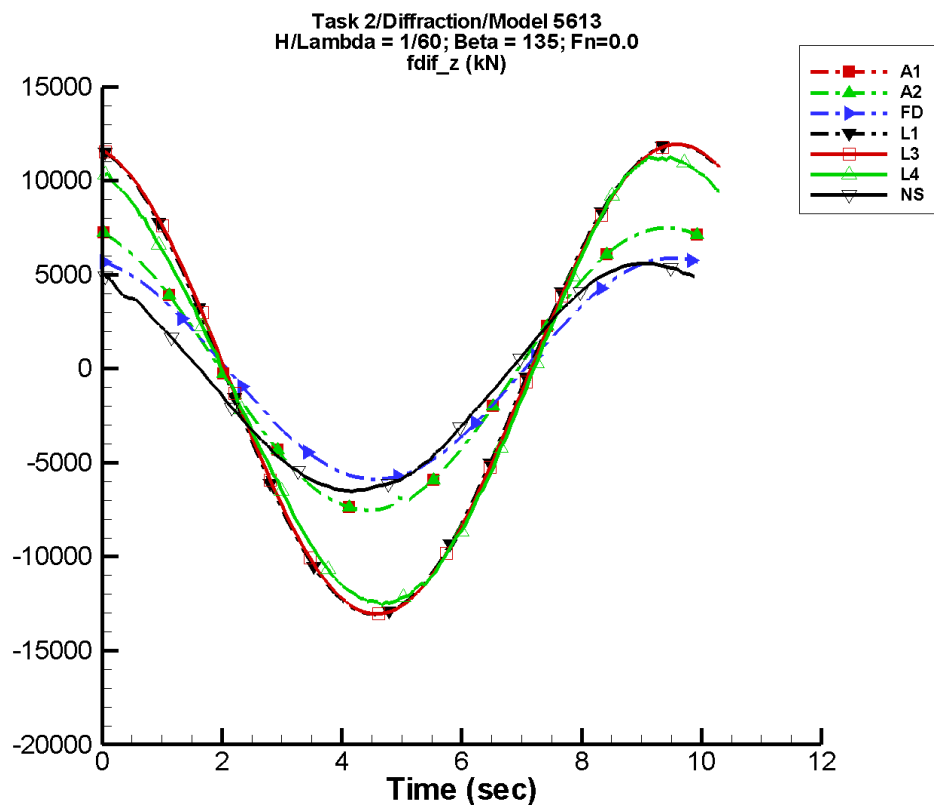
Table G–1797. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.31E-05	4.98E-02	16	9.60E-04	-179
A2	2.31E-05	4.98E-02	16	9.60E-04	-179
FD	-2.75E-07	2.10E-03	48	8.82E-07	83
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	2.26E-04	7.23E-03	-86	3.39E-03	-42

Table G–1798. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-5.22E-02	5.39E-02	-5.14E-02	5.35E-02
A2	-5.22E-02	5.39E-02	-5.14E-02	5.35E-02
FD	-2.10E-03	2.10E-03	-2.08E-03	2.08E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.272	0.292	-1.29E-02	1.08E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 180; Fn=0.0
fdif_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–900. Time history of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
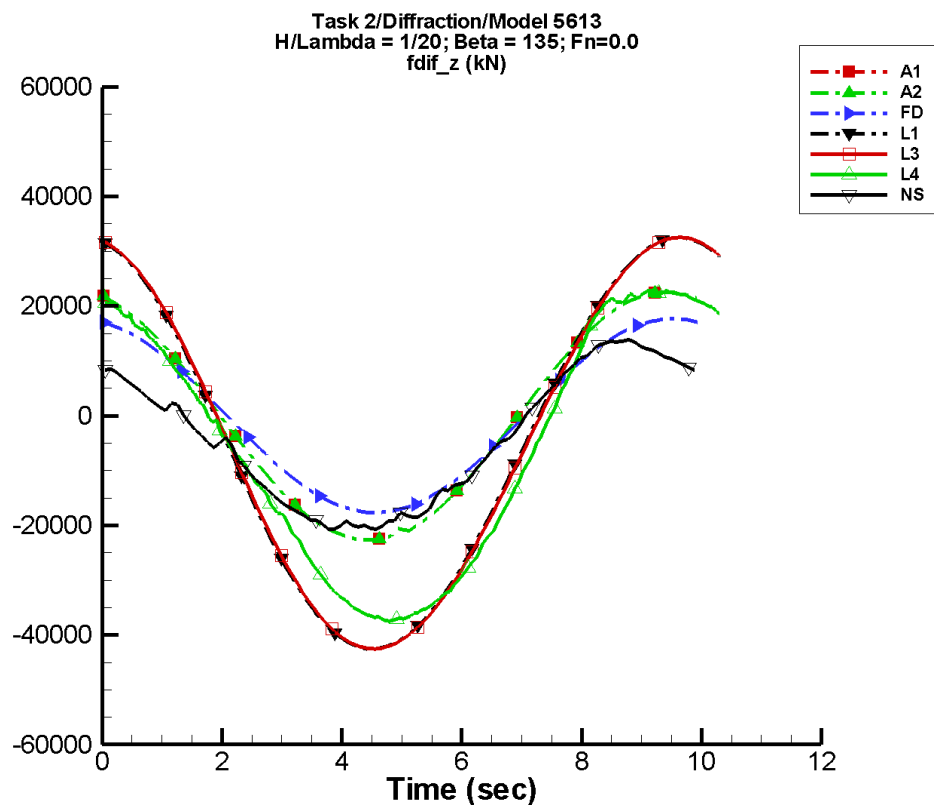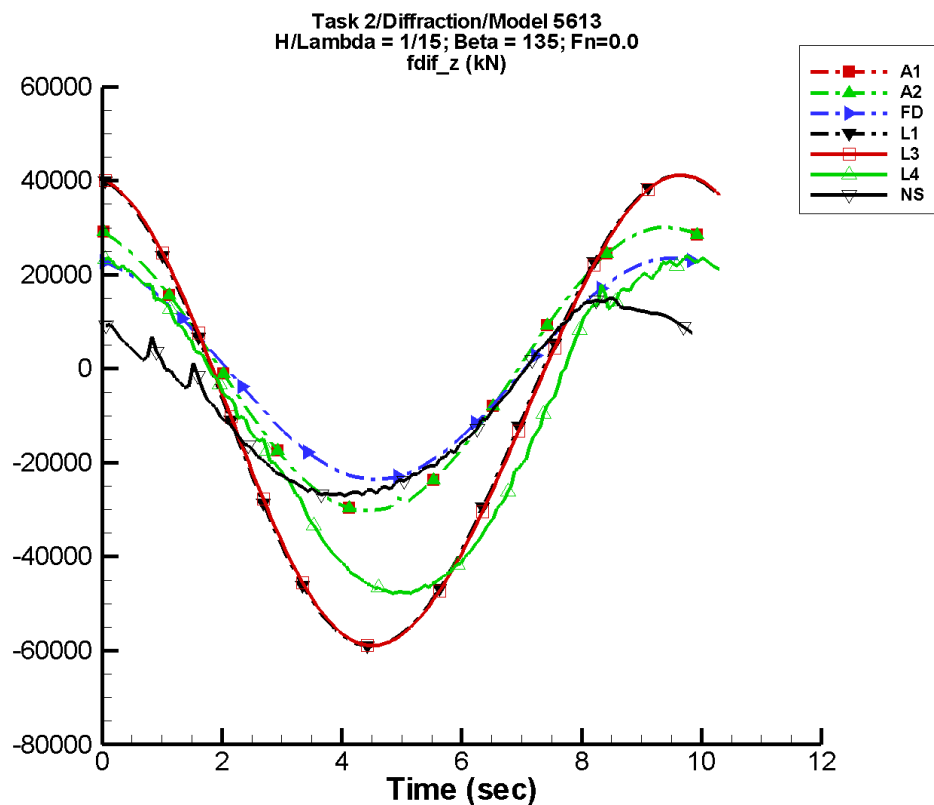
Table G–1799. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	3.46E-05	7.47E-02	16	1.44E-03	-179
A2	3.46E-05	7.47E-02	16	1.44E-03	-179
FD	-4.12E-07	3.15E-03	48	1.32E-06	83
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1800. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-7.83E-02	8.09E-02	-7.71E-02	8.03E-02
A2	-7.83E-02	8.09E-02	-7.71E-02	8.03E-02
FD	-3.15E-03	3.15E-03	-3.12E-03	3.12E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 0; Fn=0.3
fdif_mx (kN-m)

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–901. Time history of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
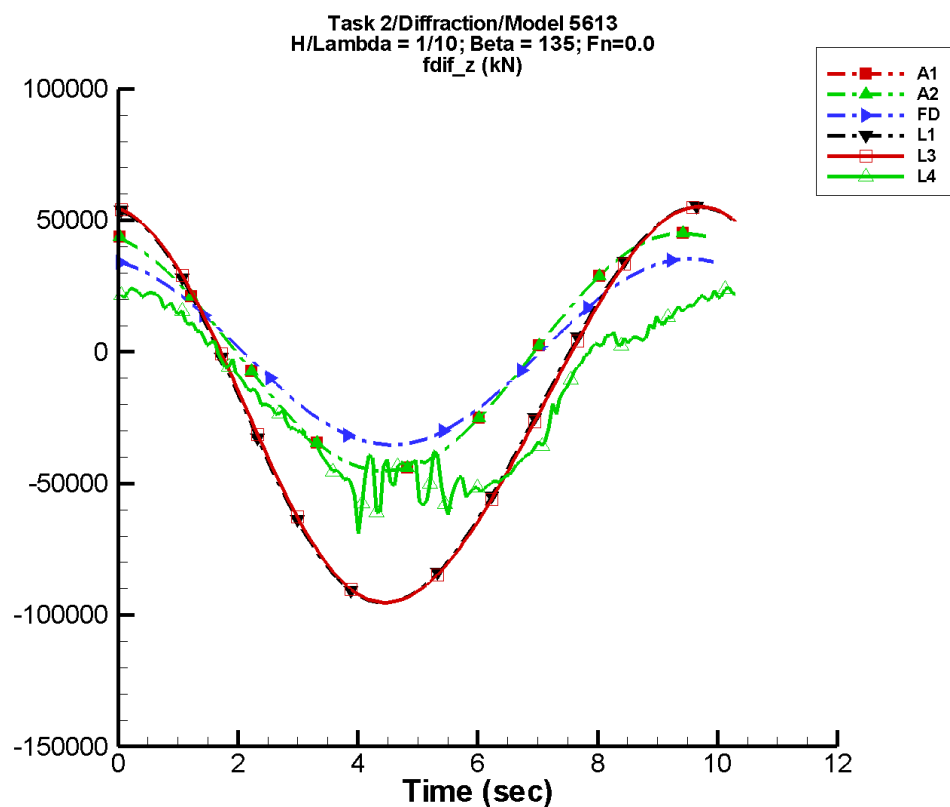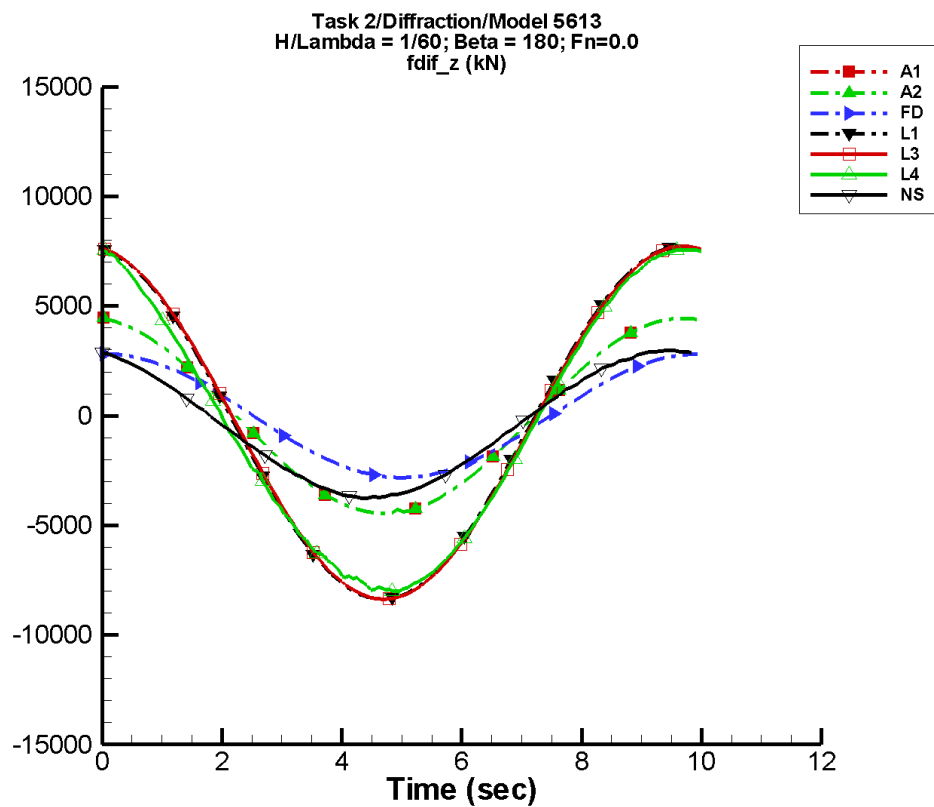
Table G–1801. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.44E-04	0.251	-75	1.98E-03	-116
A2	2.44E-04	0.251	-75	1.98E-03	-116
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.23E-04	2.04E-03	172	2.84E-03	52

Table G–1802. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.254	0.251	-0.254	0.251
A2	-0.254	0.251	-0.254	0.251
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-2.79E-02	2.45E-02	-1.85E-02	2.04E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.3
fdif_mx (kN-m)

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–902. Time history of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1803. Coefficients of the Fourier fit $a_0 + a_1 \sin\left(\omega t + \Phi_1\right) + a_2 \sin\left(2\omega t + \Phi_2\right) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	7.34E-04	0.755	-75	5.97E-03	-116
A2	7.34E-04	0.755	-75	5.97E-03	-116
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	2.42E-03	3.93E-03	20	7.22E-03	46

Table G–1804. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
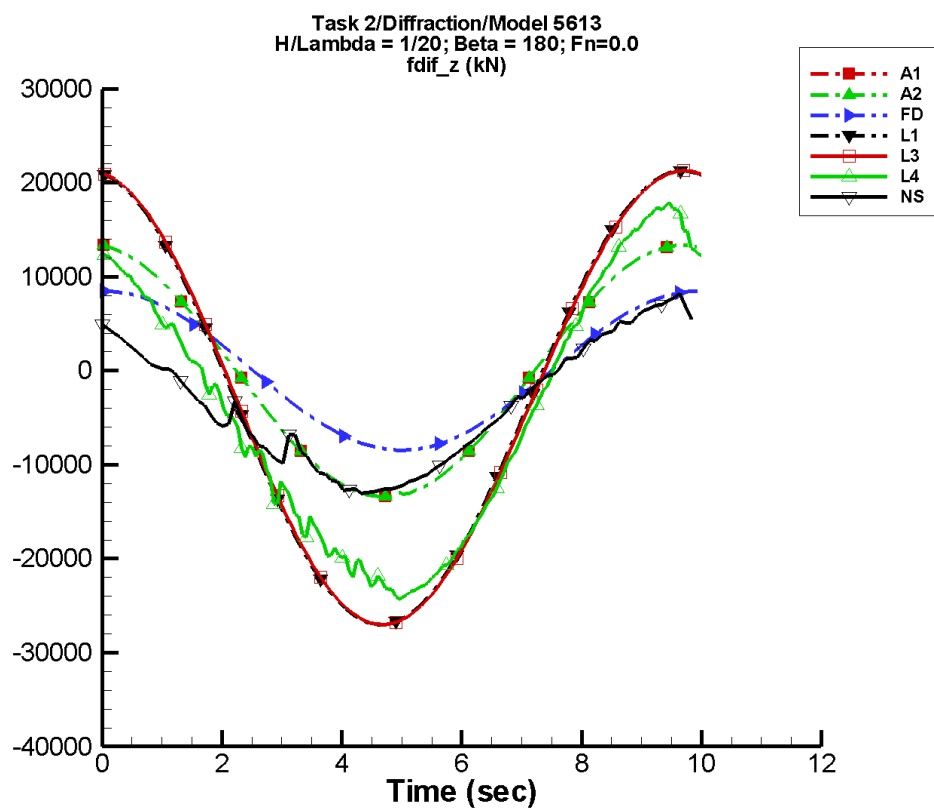
Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-0.763	0.756	-0.763	0.755
A2	-0.763	0.756	-0.763	0.755
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.278	0.296	-2.45E-02	2.67E-02

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–903. Time history of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
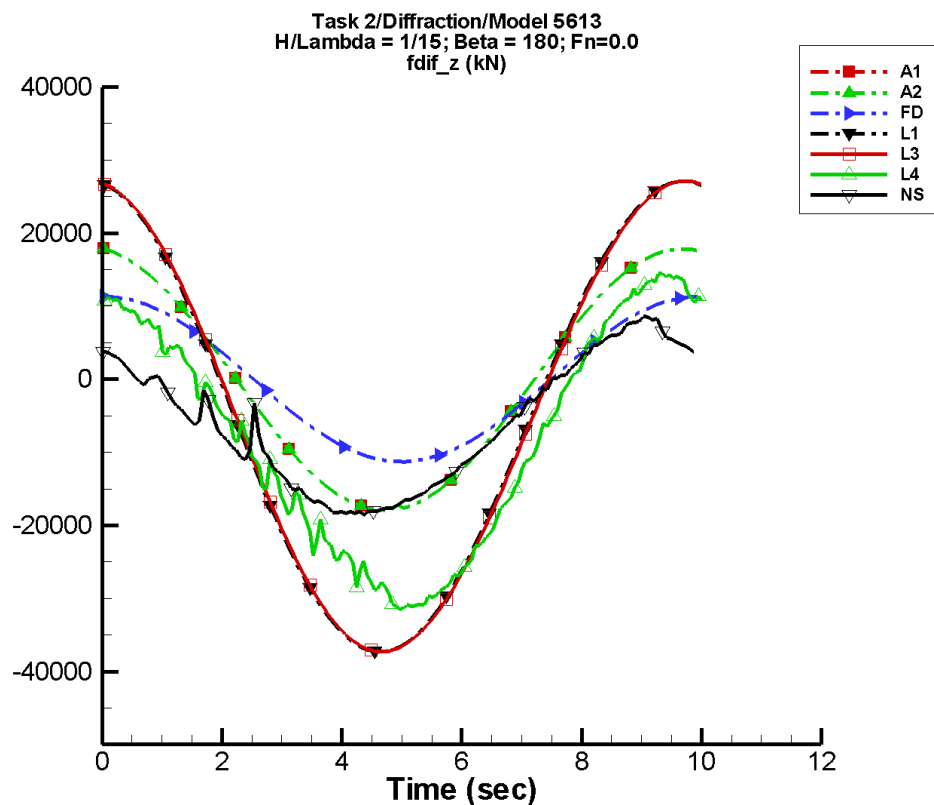
Table G–1805. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	9.80E-04	1.01	-75	7.96E-03	-116
A2	9.80E-04	1.01	-75	7.96E-03	-116
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-3.50E-04	2.24E-03	-176	6.38E-03	-131

Table G–1806. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.02	1.01	-1.02	1.01
A2	-1.02	1.01	-1.02	1.01
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-4.39E-02	4.96E-02	-2.43E-02	3.08E-02

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–904. Time history of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
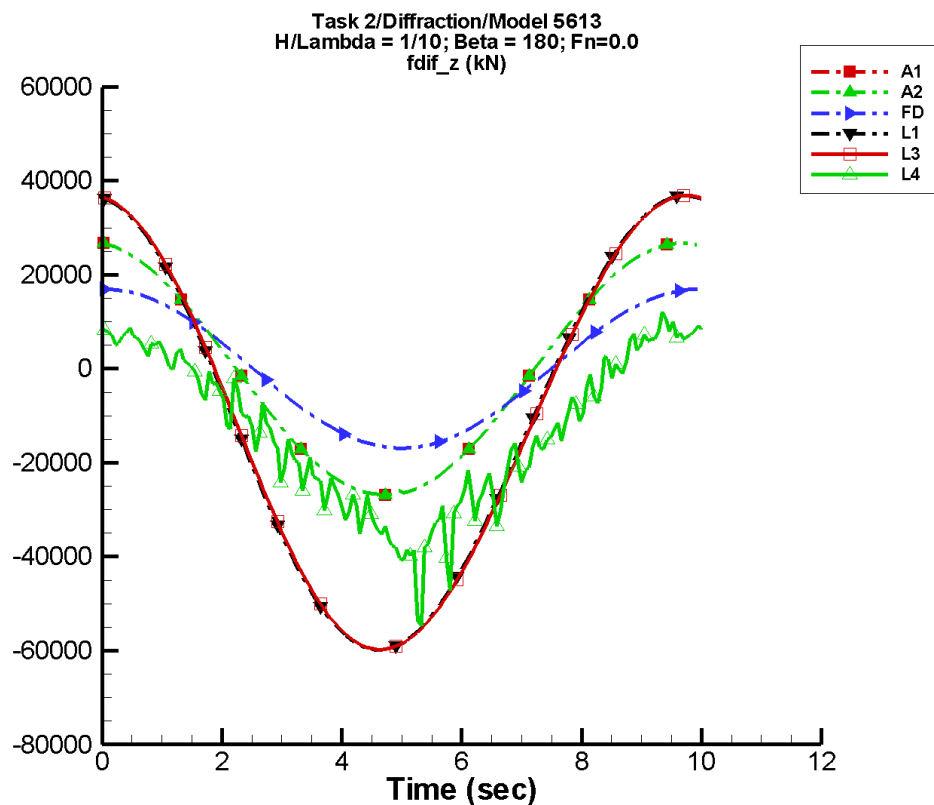
Table G–1807. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.47E-03	1.51	-75	1.19E-02	-116
A2	1.47E-03	1.51	-75	1.19E-02	-116
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1808. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

| Code | Unfiltered | | Filtered | |
	Minimum (kN-m)	Maximum (kN-m)	Minimum (kN-m)	Maximum (kN-m)
A1	-1.53	1.51	-1.53	1.51
A2	-1.53	1.51	-1.53	1.51
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–905. Time history of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
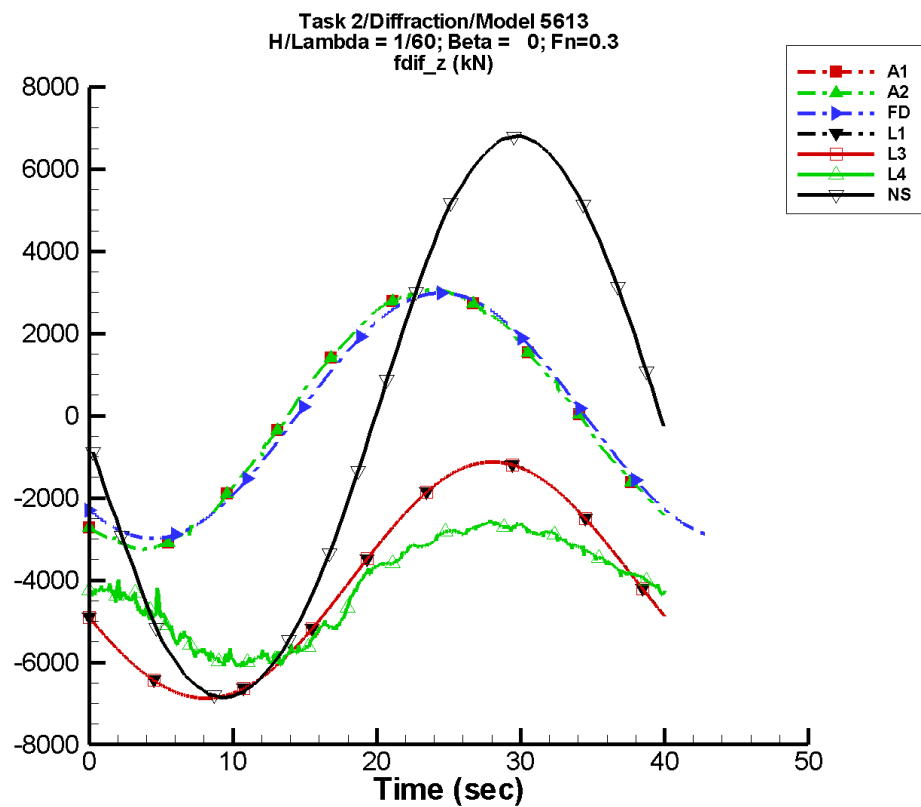
Table G–1809. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-1.93	2.98E+03	-81	2.94	75
A2	-1.93	2.98E+03	-81	2.94	75
FD	-1.72E-02	1.81E+03	-62	2.87E-02	-47
L1	723.	1.90E+03	-59	80.7	52
L3	723.	1.89E+03	-59	80.6	52
L4	1.01E+03	2.64E+03	-54	160.	147
NF	—	—	—	—	—
NS	-3.70	2.94E+03	-49	282.	134

Table G–1810. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

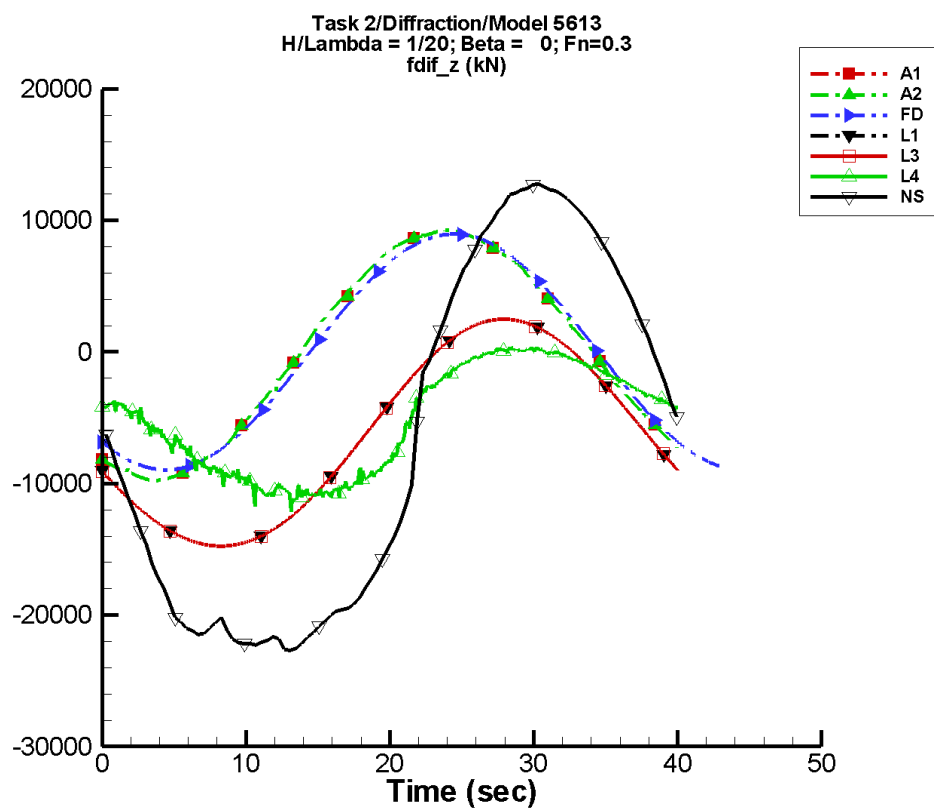| Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.07E+03	3.06E+03	-3.06E+03	3.05E+03
A2	-3.07E+03	3.06E+03	-3.06E+03	3.05E+03
FD	-1.81E+03	1.81E+03	-1.81E+03	1.81E+03
L1	-1.20E+03	2.61E+03	-1.19E+03	2.61E+03
L3	-1.19E+03	2.61E+03	-1.18E+03	2.61E+03
L4	-1.61E+03	5.98E+03	-1.56E+03	3.95E+03
NF	—	—	—	—
NS	-2.92E+03	3.45E+03	-2.87E+03	3.43E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–906. Time history of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
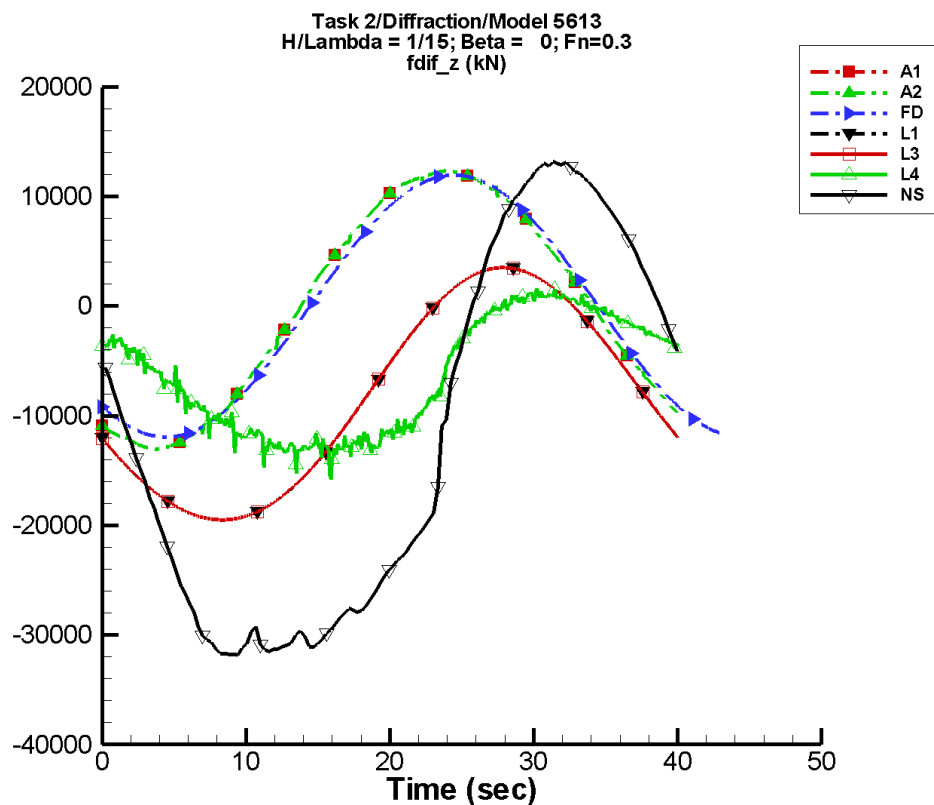
Table G–1811. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-5.81	8.98E+03	-81	8.84	75
A2	-5.81	8.98E+03	-81	8.84	75
FD	-5.21E-02	5.44E+03	-62	8.56E-02	-47
L1	6.51E+03	5.69E+03	-59	725.	52
L3	6.51E+03	5.67E+03	-59	725.	52
L4	6.36E+03	8.25E+03	-43	1.61E+03	75
NF	—	—	—	—	—
NS	-1.39E+03	1.17E+04	-55	773.	170

Table G–1812. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-9.22E+03	9.21E+03	-9.19E+03	9.18E+03
A2	-9.22E+03	9.21E+03	-9.19E+03	9.18E+03
FD	-5.43E+03	5.43E+03	-5.42E+03	5.42E+03
L1	529.	1.23E+04	535.	1.22E+04
L3	566.	1.22E+04	572.	1.22E+04
L4	-2.77E+03	2.31E+04	-1.91E+03	1.62E+04
NF	—	—	—	—
NS	-1.57E+04	1.22E+04	-1.36E+04	1.18E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–907. Time history of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
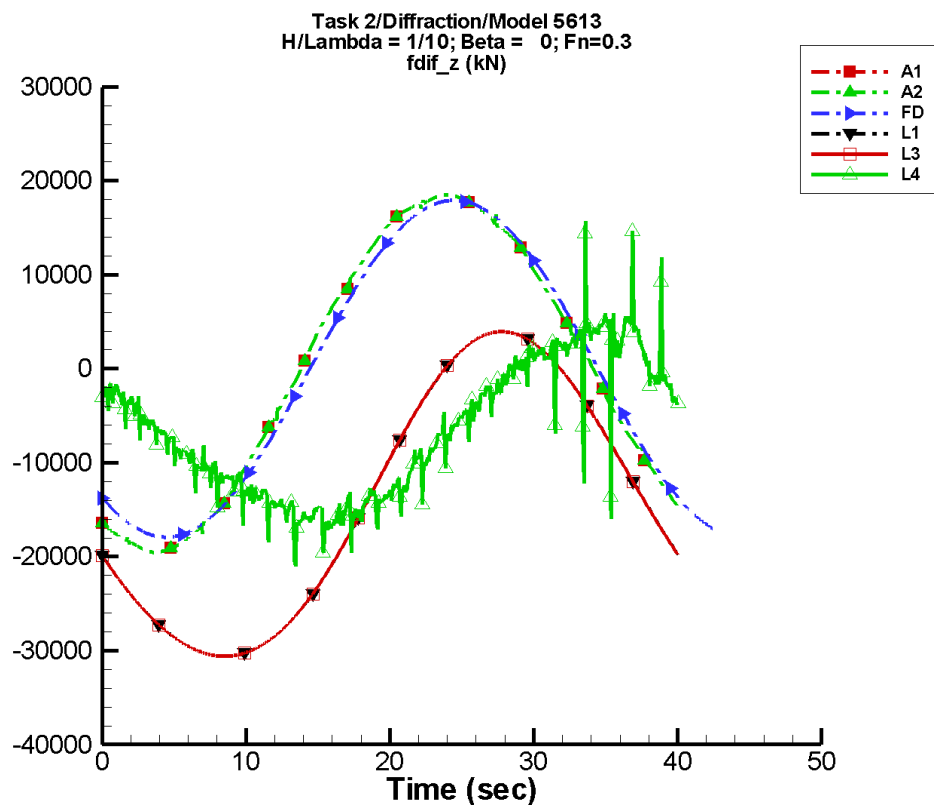
Table G–1813. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-7.76	1.20E+04	-81	11.8	75
A2	-7.76	1.20E+04	-81	11.8	75
FD	-6.89E-02	7.25E+03	-62	0.115	-47
L1	1.16E+04	7.59E+03	-59	1.29E+03	52
L3	1.16E+04	7.56E+03	-59	1.29E+03	52
L4	6.20E+03	1.27E+04	-25	3.72E+03	89
NF	—	—	—	—	—
NS	-2.69E+03	1.59E+04	-54	1.07E+03	170

Table G–1814. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.23E+04	1.23E+04	-1.23E+04	1.23E+04
A2	-1.23E+04	1.23E+04	-1.23E+04	1.23E+04
FD	-7.25E+03	7.25E+03	-7.23E+03	7.23E+03
L1	3.40E+03	1.93E+04	3.41E+03	1.93E+04
L3	3.45E+03	1.93E+04	3.46E+03	1.93E+04
L4	-2.30E+04	2.77E+04	-1.67E+04	1.81E+04
NF	—	—	—	—
NS	-2.25E+04	1.64E+04	-1.97E+04	1.50E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–908. Time history of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
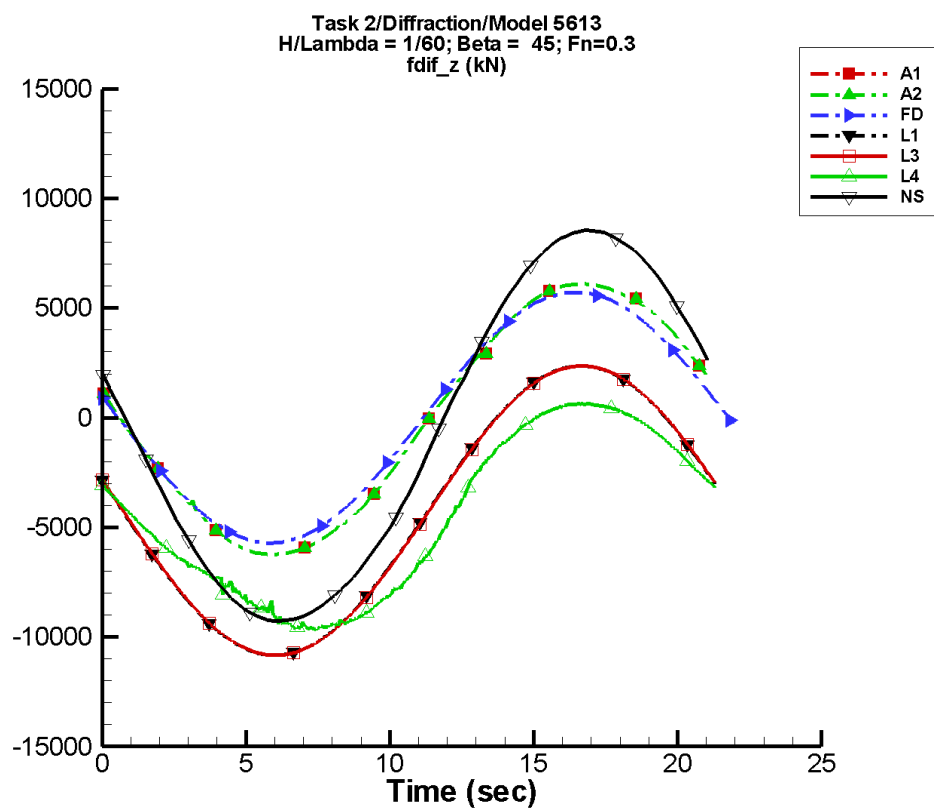
Table G–1815. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-11.6	1.80E+04	-81	17.7	75
A2	-11.6	1.80E+04	-81	17.7	75
FD	-0.104	1.09E+04	-62	0.171	-47
L1	2.60E+04	1.14E+04	-59	2.90E+03	52
L3	2.60E+04	1.13E+04	-59	2.90E+03	52
L4	-4.65E+03	2.71E+04	-49	9.39E+03	-44
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1816. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

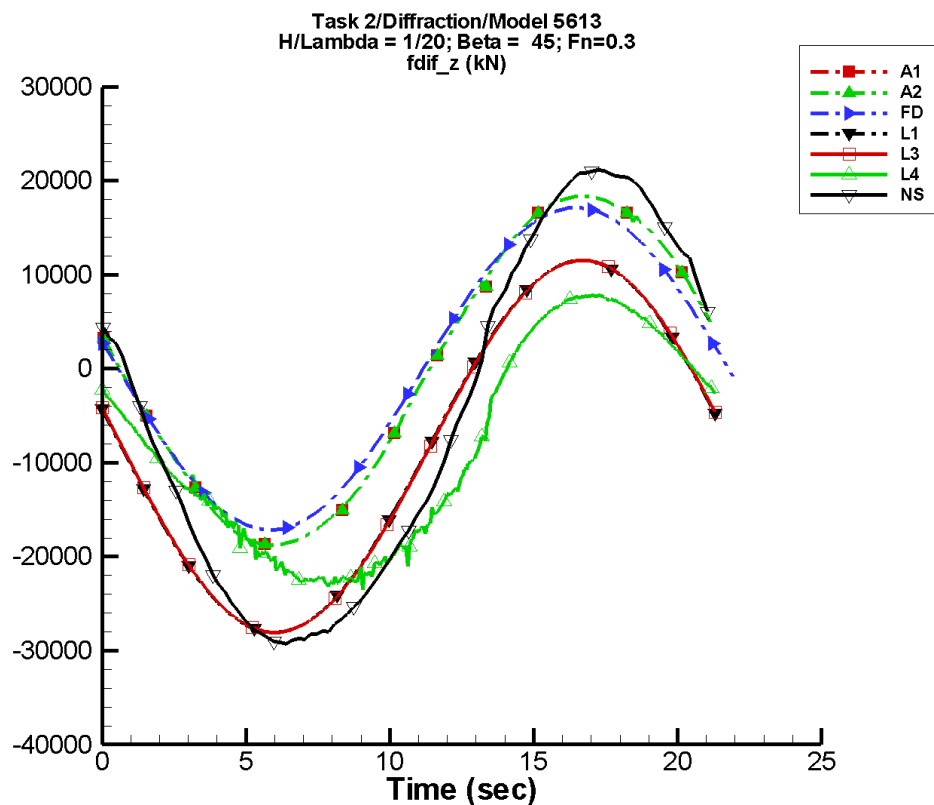| Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.85E+04	1.84E+04	-1.84E+04	1.84E+04
A2	-1.85E+04	1.84E+04	-1.84E+04	1.84E+04
FD	-1.09E+04	1.09E+04	-1.08E+04	1.08E+04
L1	1.31E+04	3.82E+04	1.31E+04	3.82E+04
L3	1.32E+04	3.82E+04	1.32E+04	3.82E+04
L4	-2.30E+05	6.10E+04	-8.01E+04	1.83E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–909. Time history of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
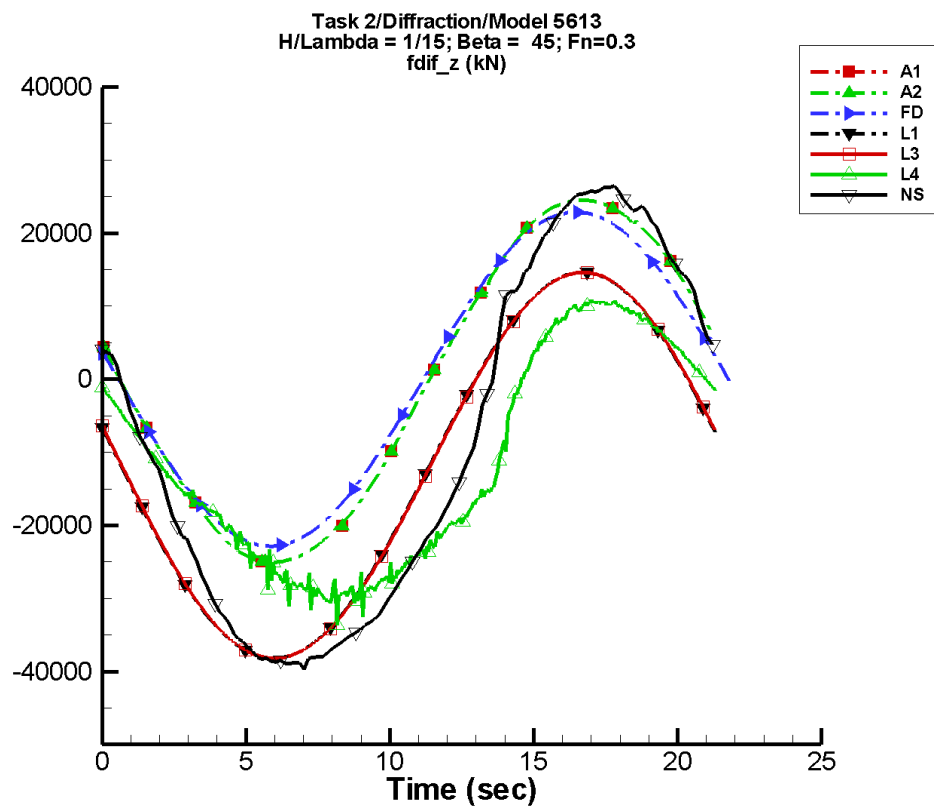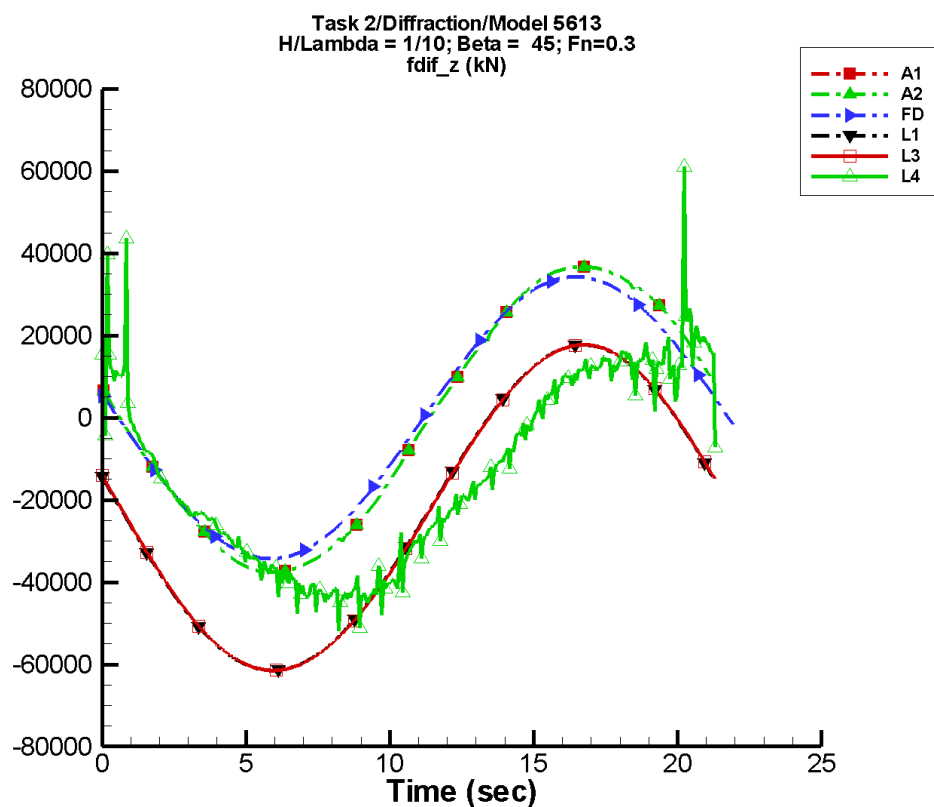
Table G–1817. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-2.21	6.05E+03	-107	15.3	-172
A2	-2.21	6.05E+03	-107	15.3	-172
FD	1.25	5.55E+03	-119	2.39	-84
L1	932.	6.03E+03	-78	1.47E+03	-164
L3	932.	5.99E+03	-79	1.47E+03	-164
L4	1.06E+03	5.32E+03	-74	985.	163
NF	—	—	—	—	—
NS	-177.	4.73E+03	-114	1.19E+03	102

Table G–1818. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-6.28E+03	6.25E+03	-6.14E+03	5.95E+03
A2	-6.28E+03	6.25E+03	-6.14E+03	5.95E+03
FD	-5.55E+03	5.55E+03	-5.50E+03	5.50E+03
L1	-5.53E+03	7.70E+03	-5.57E+03	7.66E+03
L3	-5.53E+03	7.63E+03	-5.56E+03	7.59E+03
L4	-5.33E+03	9.77E+03	-4.61E+03	8.89E+03
NF	—	—	—	—
NS	-5.10E+03	5.33E+03	-4.77E+03	5.08E+03

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.3
fdif_mx (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–910. Time history of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
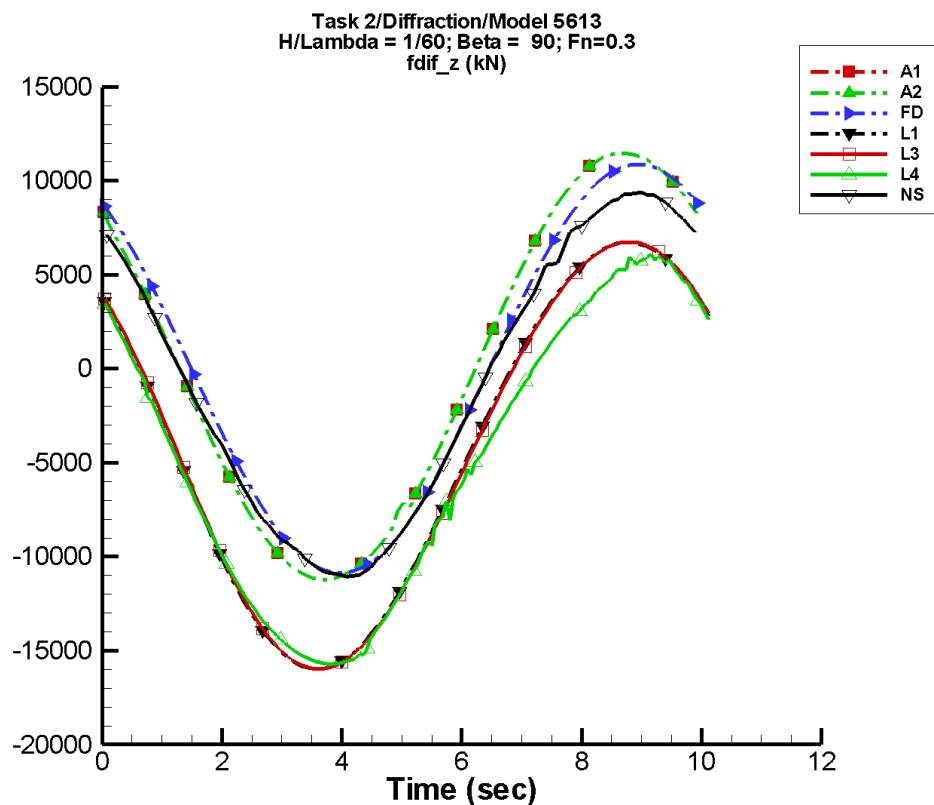
Table G–1819. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-6.64	1.82E+04	-107	46.0	-172
A2	-6.64	1.82E+04	-107	46.0	-172
FD	3.74	1.67E+04	-119	7.16	-84
L1	8.38E+03	1.81E+04	-78	1.32E+04	-164
L3	8.38E+03	1.80E+04	-79	1.32E+04	-164
L4	6.13E+03	1.60E+04	-82	9.85E+03	156
NF	—	—	—	—	—
NS	-1.67E+03	1.39E+04	-109	7.81E+03	110

Table G–1820. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.89E+04	1.88E+04	-1.85E+04	1.79E+04
A2	-1.89E+04	1.88E+04	-1.85E+04	1.79E+04
FD	-1.67E+04	1.67E+04	-1.65E+04	1.65E+04
L1	-1.82E+04	3.63E+04	-1.80E+04	3.61E+04
L3	-1.83E+04	3.61E+04	-1.80E+04	3.58E+04
L4	-1.17E+04	4.42E+04	-1.13E+04	4.01E+04
NF	—	—	—	—
NS	-2.32E+04	2.48E+04	-1.91E+04	2.12E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–911. Time history of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1821. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
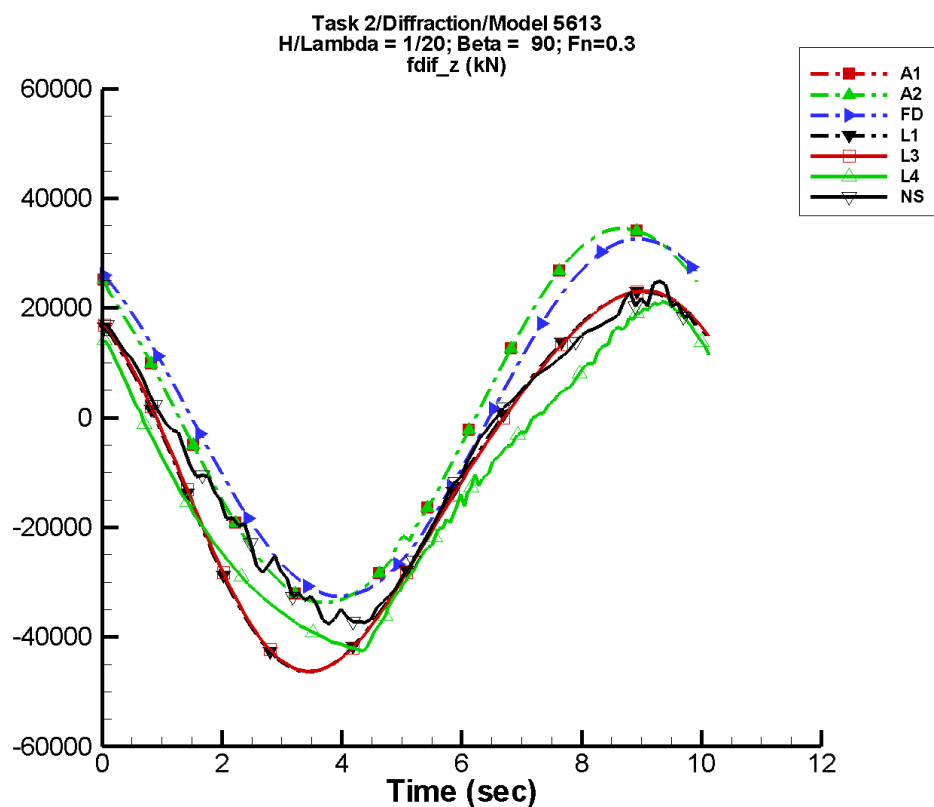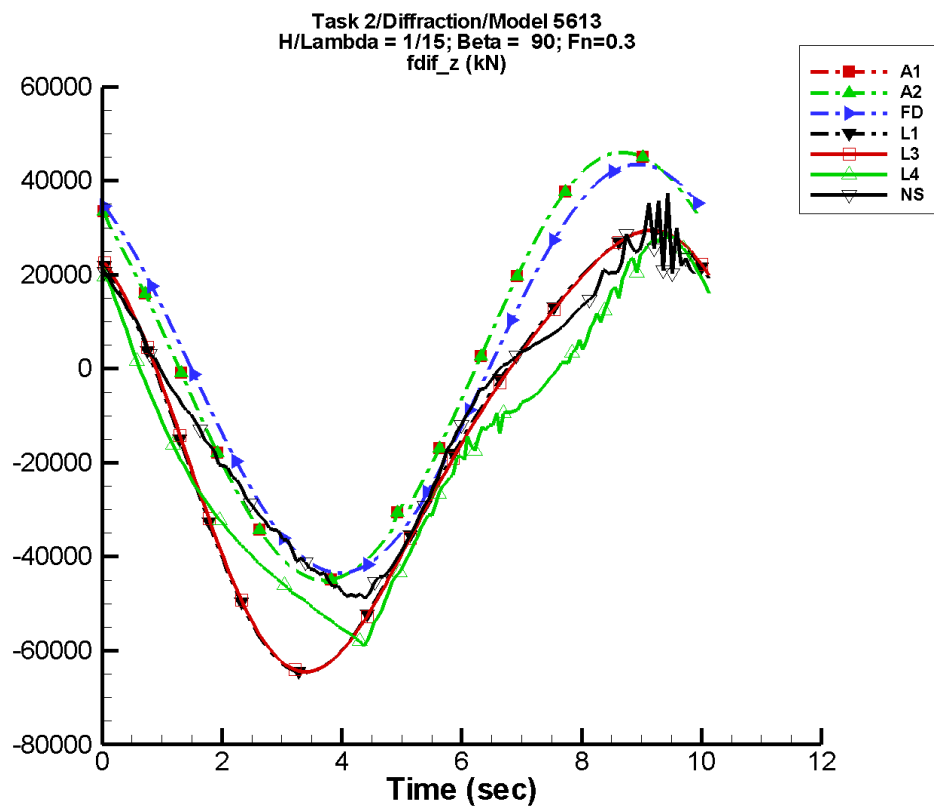
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-8.86	2.43E+04	-107	61.4	-172
A2	-8.86	2.43E+04	-107	61.4	-172
FD	4.99	2.22E+04	-119	9.54	-84
L1	1.49E+04	2.41E+04	-78	2.35E+04	-164
L3	1.49E+04	2.40E+04	-79	2.35E+04	-164
L4	4.67E+03	2.24E+04	-87	1.97E+04	144
NF	—	—	—	—	—
NS	-1.44E+03	1.68E+04	-99	1.14E+04	112

Table G–1822. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.52E+04	2.51E+04	-2.46E+04	2.39E+04
A2	-2.52E+04	2.51E+04	-2.46E+04	2.39E+04
FD	-2.22E+04	2.22E+04	-2.20E+04	2.20E+04
L1	-2.60E+04	5.77E+04	-2.56E+04	5.73E+04
L3	-2.61E+04	5.74E+04	-2.58E+04	5.70E+04
L4	-2.53E+04	6.67E+04	-2.45E+04	5.94E+04
NF	—	—	—	—
NS	-2.99E+04	3.52E+04	-2.35E+04	3.01E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 90; Fn=0.3
fdif_mx (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–912. Time history of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
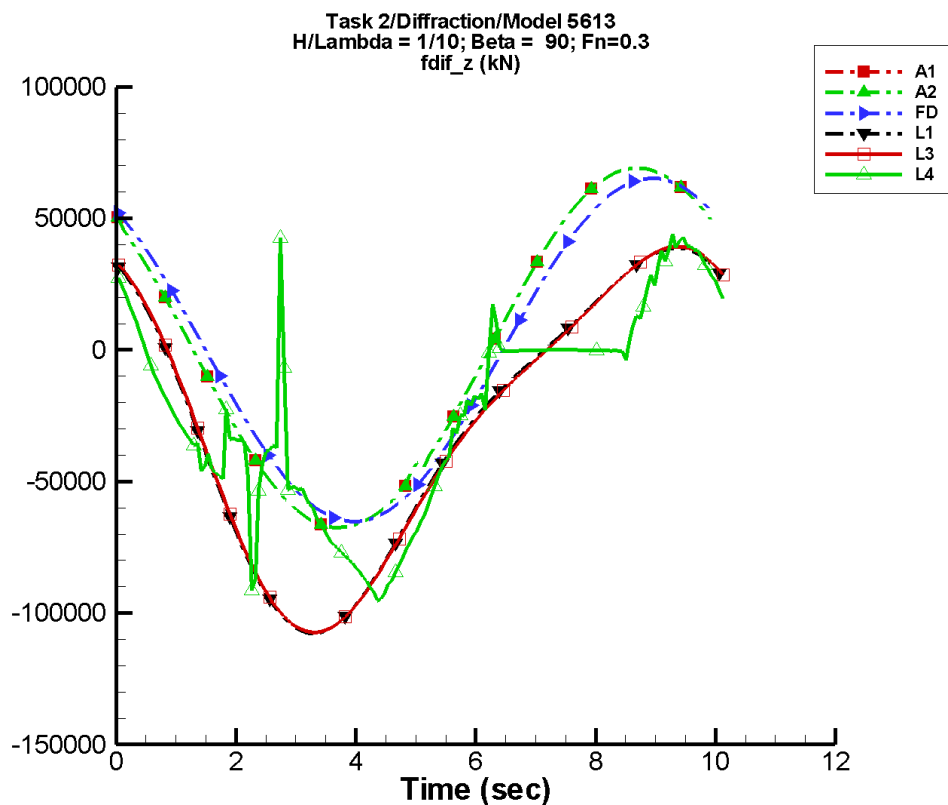
Table G–1823. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-13.3	3.64E+04	-107	92.1	-172
A2	-13.3	3.64E+04	-107	92.1	-172
FD	7.49	3.33E+04	-119	14.3	-84
L1	3.35E+04	3.62E+04	-78	5.30E+04	-164
L3	3.35E+04	3.59E+04	-79	5.30E+04	-164
L4	-1.63E+04	5.37E+04	-130	5.66E+04	125
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1824. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.79E+04	3.76E+04	-3.70E+04	3.58E+04
A2	-3.79E+04	3.76E+04	-3.70E+04	3.58E+04
FD	-3.33E+04	3.33E+04	-3.30E+04	3.30E+04
L1	-4.48E+04	1.15E+05	-4.40E+04	1.14E+05
L3	-4.50E+04	1.14E+05	-4.42E+04	1.14E+05
L4	-3.30E+05	1.12E+05	-1.56E+05	9.79E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–913. Time history of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
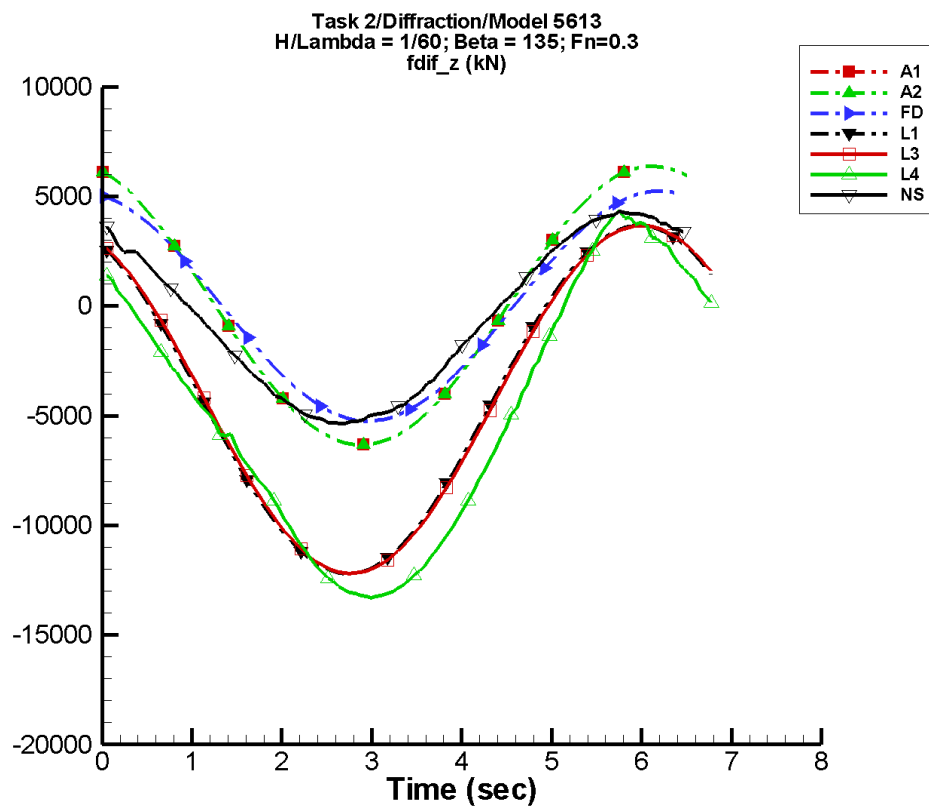
Table G–1825. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-2.04	5.06E+03	-149	27.1	161
A2	-2.04	5.06E+03	-149	27.1	161
FD	-0.225	6.76E+03	-164	0.306	-4
L1	617.	5.49E+03	-132	167.	132
L3	617.	5.46E+03	-134	167.	132
L4	676.	4.27E+03	-130	440.	75
NF	—	—	—	—	—
NS	-62.5	3.77E+03	-168	338.	-75

Table G–1826. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-5.14E+03	5.06E+03	-5.00E+03	4.90E+03
A2	-5.14E+03	5.06E+03	-5.00E+03	4.90E+03
FD	-6.76E+03	6.76E+03	-6.63E+03	6.60E+03
L1	-4.98E+03	6.02E+03	-4.93E+03	5.97E+03
L3	-4.95E+03	5.98E+03	-4.91E+03	5.93E+03
L4	-4.46E+03	5.47E+03	-3.65E+03	5.18E+03
NF	—	—	—	—
NS	-3.66E+03	4.08E+03	-3.55E+03	3.99E+03

Data identically zero, insufficient, or not available from NFA.

Figure G–914. Time history of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

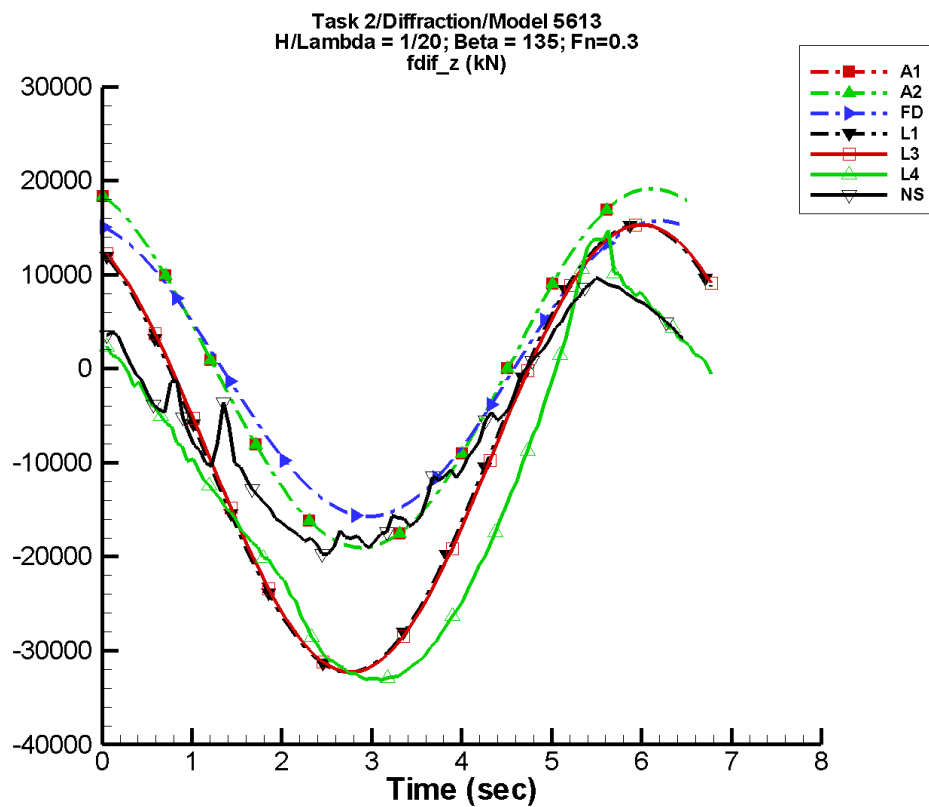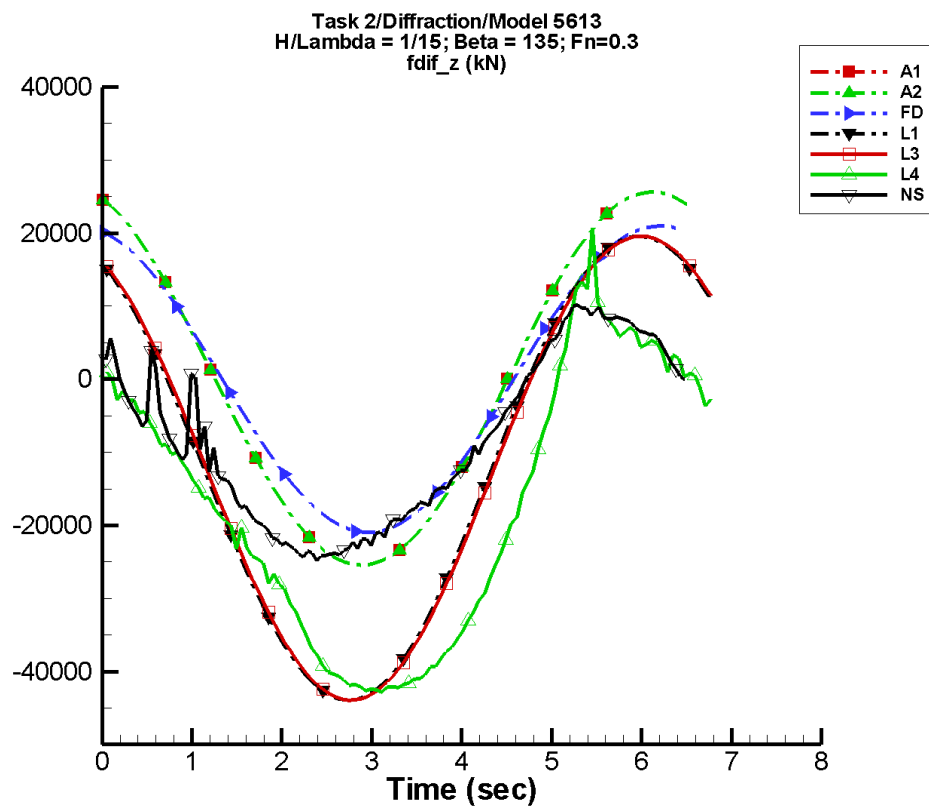Table G–1827. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-6.15	1.52E+04	-149	81.6	161
A2	-6.15	1.52E+04	-149	81.6	161
FD	-0.672	2.03E+04	-164	0.919	-4
L1	5.55E+03	1.65E+04	-132	1.50E+03	132
L3	5.55E+03	1.64E+04	-134	1.50E+03	132
L4	3.84E+03	1.34E+04	-128	889.	42
NF	—	—	—	—	—
NS	-893.	9.40E+03	-163	3.06E+03	-3

Table G–1828. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.55E+04	1.52E+04	-1.51E+04	1.47E+04
A2	-1.55E+04	1.52E+04	-1.51E+04	1.47E+04
FD	-2.03E+04	2.03E+04	-1.99E+04	1.98E+04
L1	-1.19E+04	2.14E+04	-1.18E+04	2.12E+04
L3	-1.19E+04	2.12E+04	-1.17E+04	2.11E+04
L4	-1.33E+04	1.95E+04	-9.24E+03	1.91E+04
NF	—	—	—	—
NS	-2.73E+04	1.58E+04	-1.37E+04	1.21E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–915. Time history of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
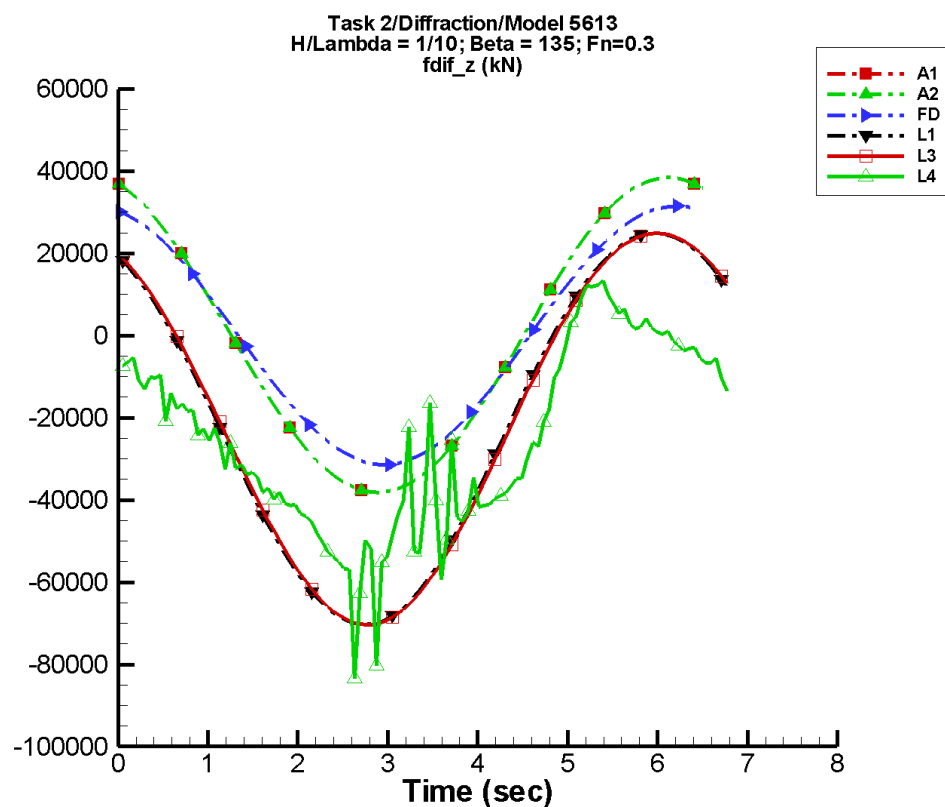
Table G–1829. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-8.21	2.03E+04	-149	109.	161
A2	-8.21	2.03E+04	-149	109.	161
FD	-0.899	2.71E+04	-164	1.22	-4
L1	9.86E+03	2.20E+04	-132	2.66E+03	132
L3	9.86E+03	2.18E+04	-134	2.66E+03	132
L4	2.62E+03	1.86E+04	-125	1.05E+03	60
NF	—	—	—	—	—
NS	-2.53E+03	1.40E+04	-145	2.90E+03	51

Table G–1830. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.07E+04	2.03E+04	-2.01E+04	1.97E+04
A2	-2.07E+04	2.03E+04	-2.01E+04	1.97E+04
FD	-2.70E+04	2.70E+04	-2.65E+04	2.64E+04
L1	-1.40E+04	3.08E+04	-1.37E+04	3.06E+04
L3	-1.39E+04	3.06E+04	-1.37E+04	3.04E+04
L4	-2.04E+04	3.24E+04	-1.52E+04	2.41E+04
NF	—	—	—	—
NS	-4.43E+04	1.70E+04	-2.10E+04	1.61E+04

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–916. Time history of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
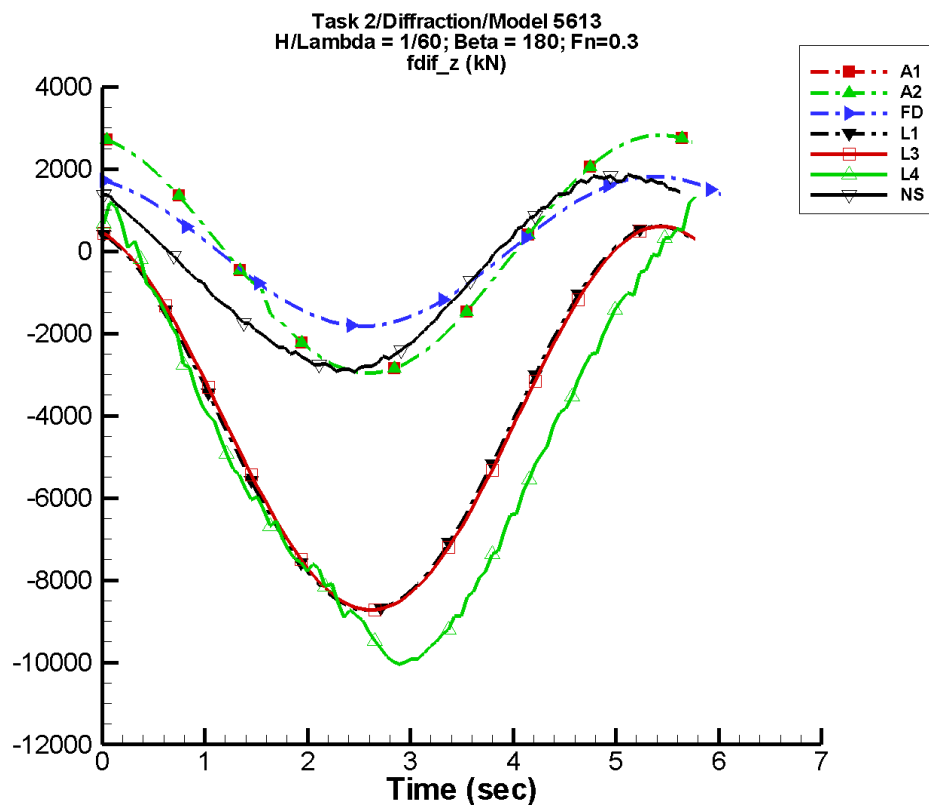
Table G–1831. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-12.3	3.05E+04	-149	164.	161
A2	-12.3	3.05E+04	-149	164.	161
FD	-1.34	4.06E+04	-164	1.84	-4
L1	2.22E+04	3.29E+04	-132	5.99E+03	132
L3	2.22E+04	3.28E+04	-134	5.99E+03	132
L4	-8.85E+03	3.58E+04	-137	3.17E+03	-65
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1832. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
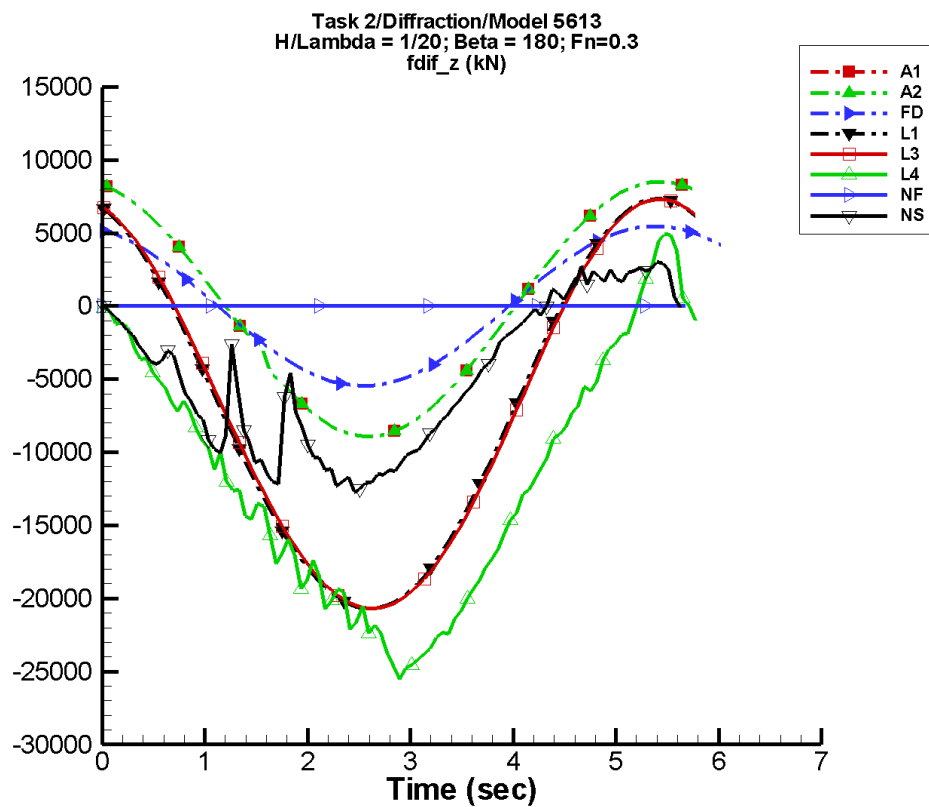
Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.10E+04	3.05E+04	-3.01E+04	2.95E+04
A2	-3.10E+04	3.05E+04	-3.01E+04	2.95E+04
FD	-4.06E+04	4.06E+04	-3.98E+04	3.96E+04
L1	-1.52E+04	5.36E+04	-1.48E+04	5.33E+04
L3	-1.52E+04	5.31E+04	-1.47E+04	5.28E+04
L4	-1.20E+05	1.36E+05	-4.12E+04	3.55E+04
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–917. Time history of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
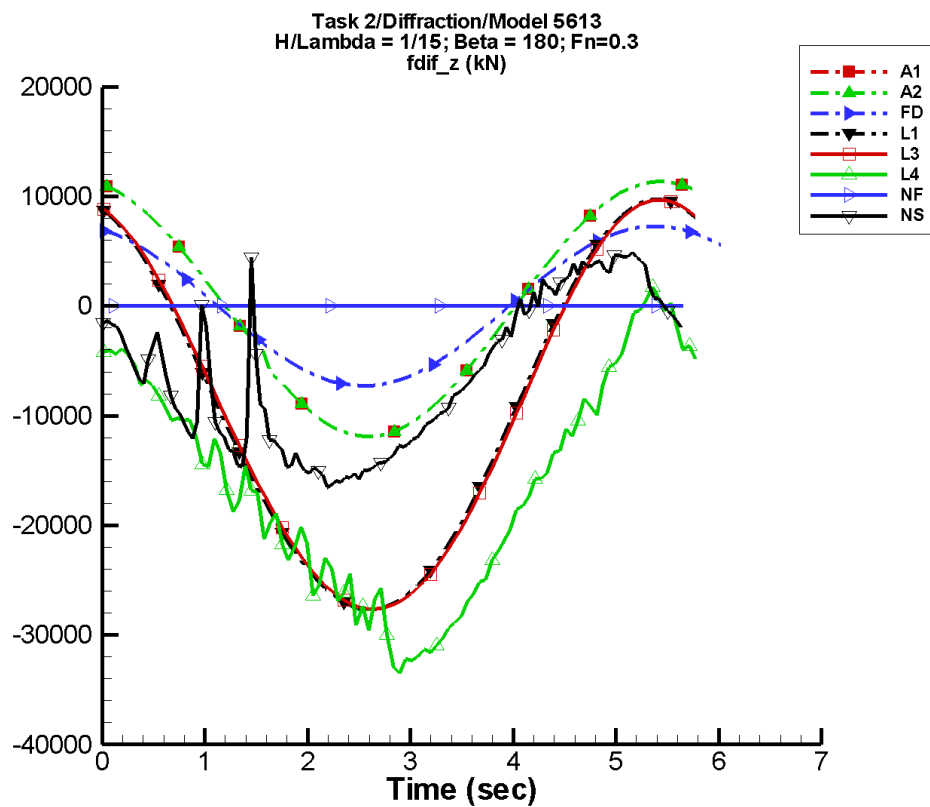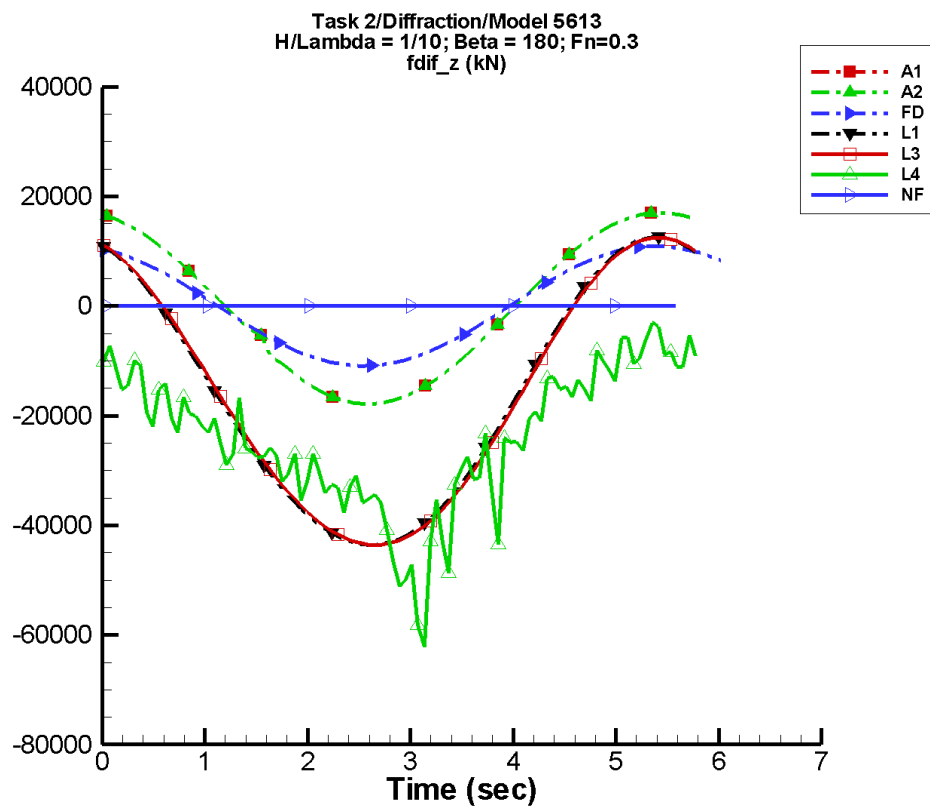
Table G–1833. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-9.16E-04	9.27E-02	94	1.75E-03	-60
A2	-9.16E-04	9.27E-02	94	1.75E-03	-60
FD	-3.85E-07	6.64E-04	-23	1.09E-06	-79
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.35E-04	5.04E-05	159	7.03E-04	59

Table G–1834. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-9.46E-02	9.01E-02	-9.16E-02	8.75E-02
A2	-9.46E-02	9.01E-02	-9.16E-02	8.75E-02
FD	-6.64E-04	6.64E-04	-6.44E-04	6.44E-04
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-8.91E-02	0.110	-3.30E-03	2.99E-03

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–918. Time history of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1835. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-2.76E-03	0.279	94	5.26E-03	-60
A2	-2.76E-03	0.279	94	5.26E-03	-60
FD	-1.15E-06	1.99E-03	-23	3.27E-06	-79
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-5.69E-05	6.34E-03	-72	4.56E-03	-122

Table G–1836. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.284	0.271	-0.276	0.263
A2	-0.284	0.271	-0.276	0.263
FD	-1.99E-03	1.99E-03	-1.93E-03	1.93E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-7.73E-02	9.72E-02	-3.12E-02	1.37E-02

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–919. Time history of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
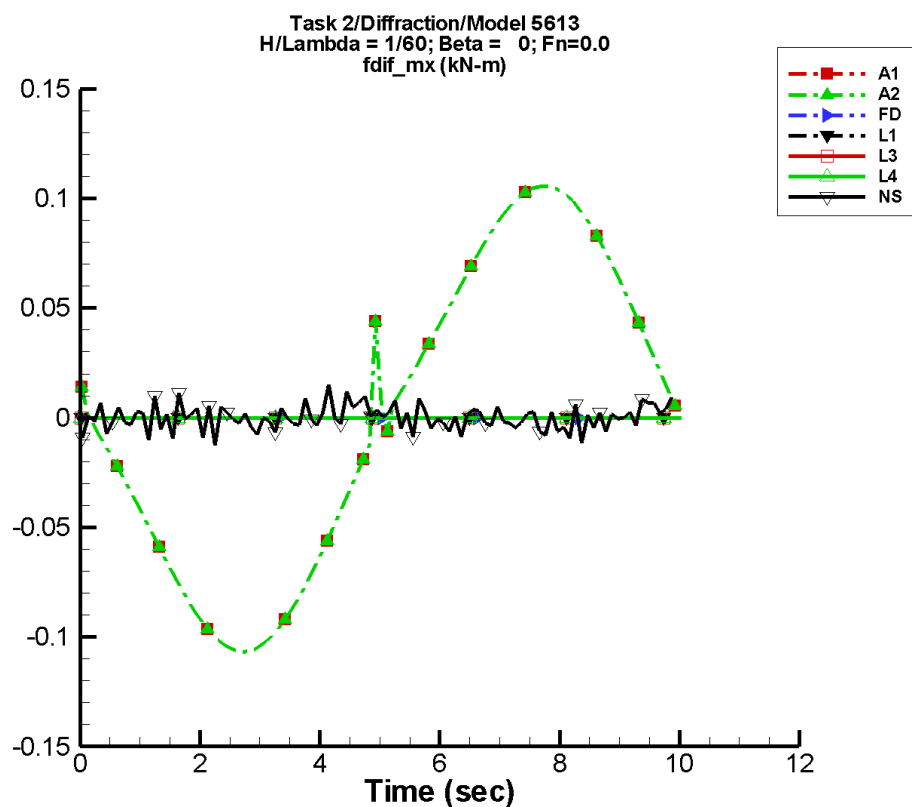
Table G–1837. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-3.68E-03	0.372	94	7.02E-03	-60
A2	-3.68E-03	0.372	94	7.02E-03	-60
FD	-1.54E-06	2.66E-03	-23	4.36E-06	-79
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	2.10E-04	5.47E-03	-136	2.39E-03	51

Table G–1838. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

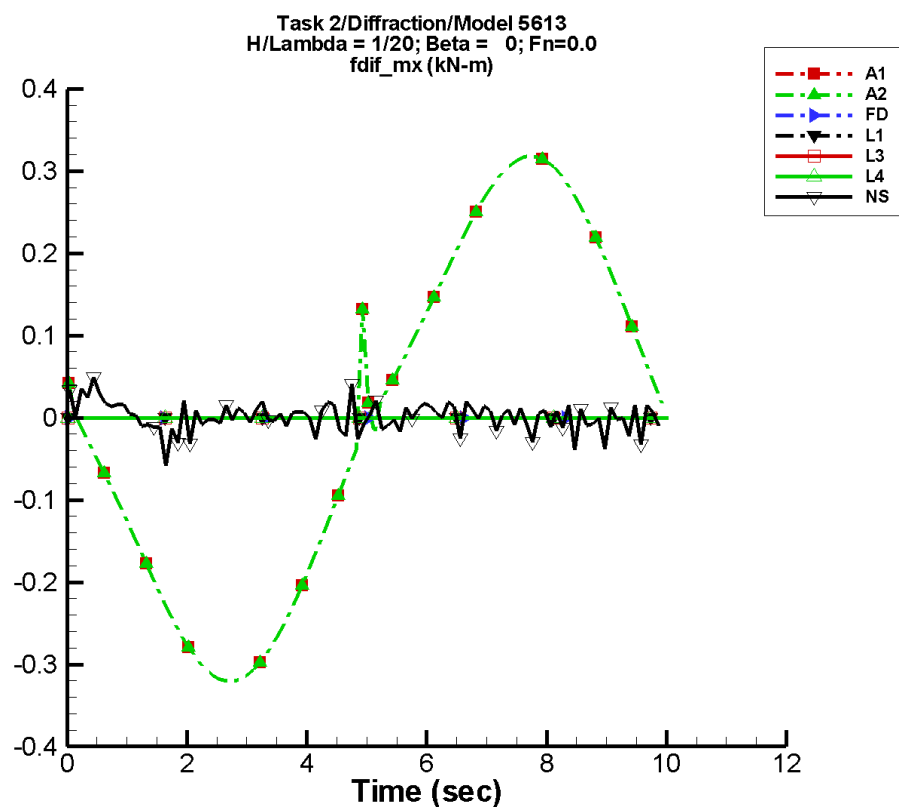| Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.380	0.362	-0.368	0.351
A2	-0.380	0.362	-0.368	0.351
FD	-2.66E-03	2.66E-03	-2.57E-03	2.58E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.486	0.456	-2.61E-02	1.55E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 180; Fn=0.3
fdif_mx (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–920. Time history of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
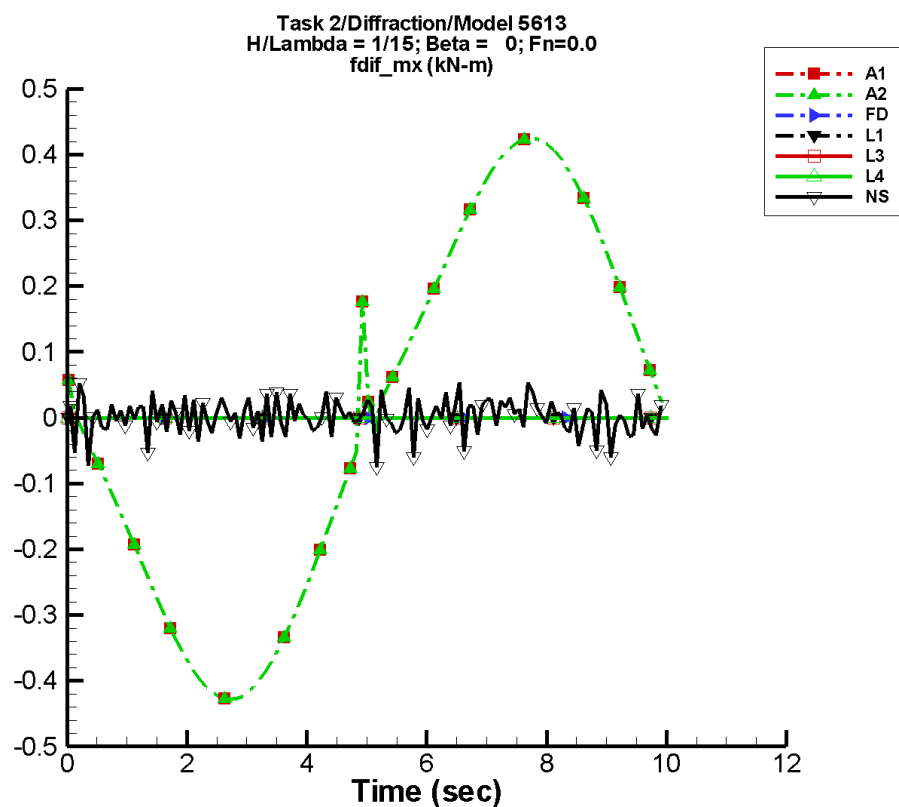
Table G–1839. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-5.52E-03	0.559	94	1.05E-02	-60
A2	-5.52E-03	0.559	94	1.05E-02	-60
FD	-2.31E-06	3.99E-03	-23	6.53E-06	-79
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1840. Minimum and maximum of of M_x^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-0.570	0.543	-0.552	0.527
A2	-0.570	0.543	-0.552	0.527
FD	-3.98E-03	3.98E-03	-3.86E-03	3.86E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–921. Time history of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
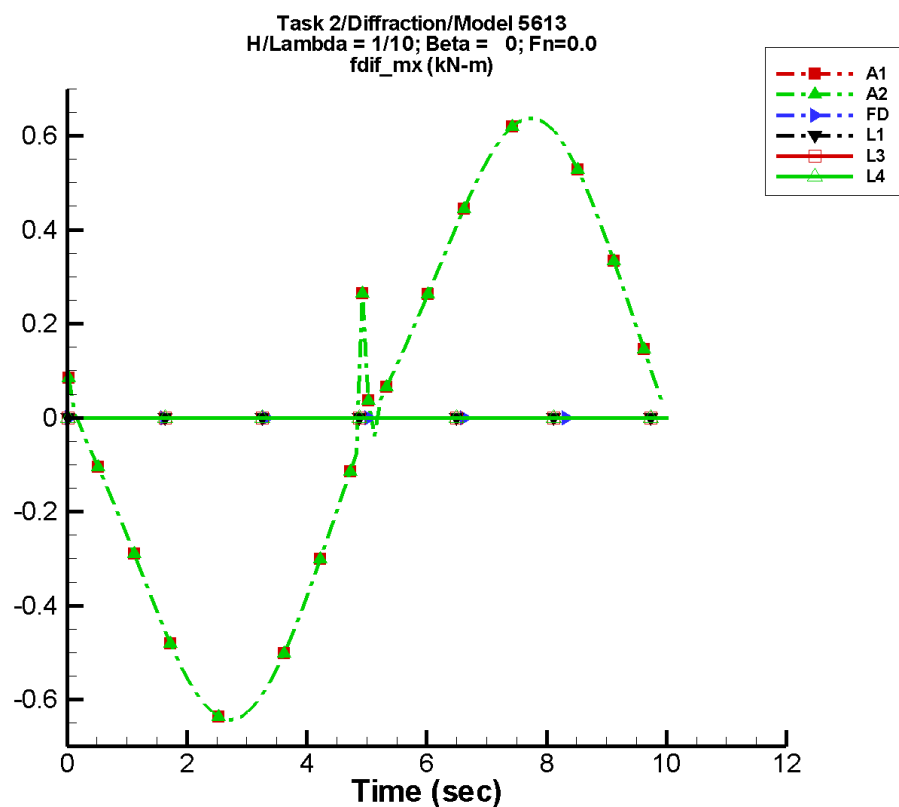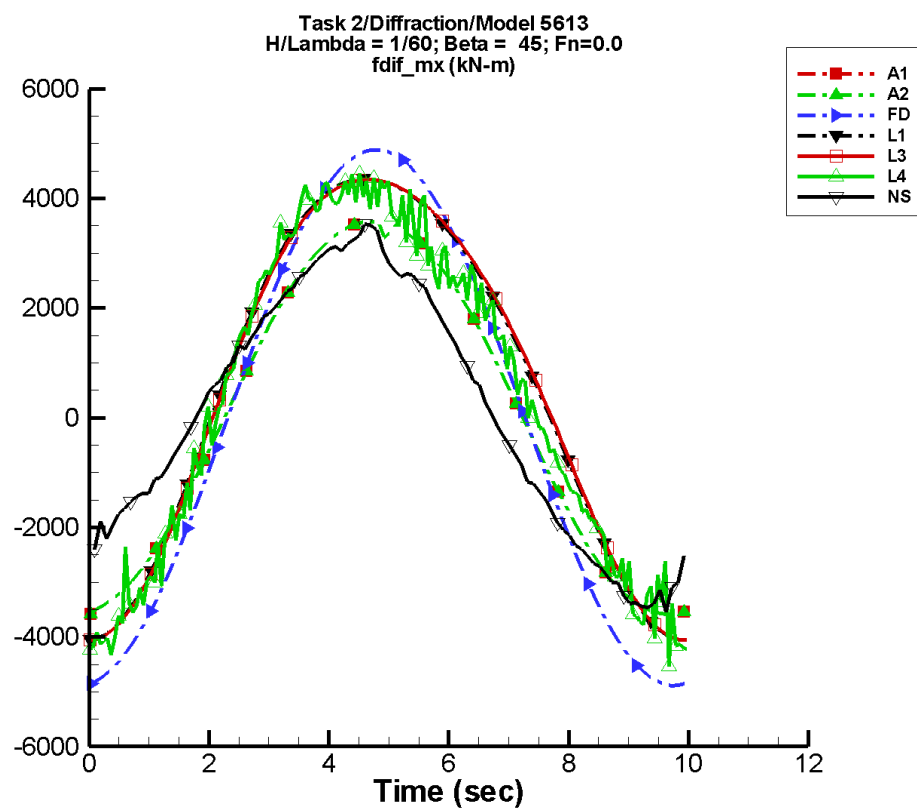
Table G–1841. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-286.	2.94E+05	-113	144.	-142
A2	-286.	2.94E+05	-113	144.	-142
FD	41.5	2.51E+05	-127	106.	-92
L1	-4.34E+03	2.67E+05	-99	716.	33
L3	-4.34E+03	2.67E+05	-100	712.	33
L4	-7.08E+03	2.46E+05	-103	1.68E+04	16
NF	—	—	—	—	—
NS	-3.92E+03	2.06E+05	-129	1.28E+03	-1

Table G–1842. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.95E+05	2.95E+05	-2.91E+05	2.91E+05
A2	-2.95E+05	2.95E+05	-2.91E+05	2.91E+05
FD	-2.51E+05	2.51E+05	-2.49E+05	2.49E+05
L1	-2.71E+05	2.64E+05	-2.71E+05	2.63E+05
L3	-2.71E+05	2.64E+05	-2.71E+05	2.63E+05
L4	-2.58E+05	2.80E+05	-2.57E+05	2.66E+05
NF	—	—	—	—
NS	-2.13E+05	2.07E+05	-2.10E+05	2.03E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–922. Time history of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period $= 9.93$ sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
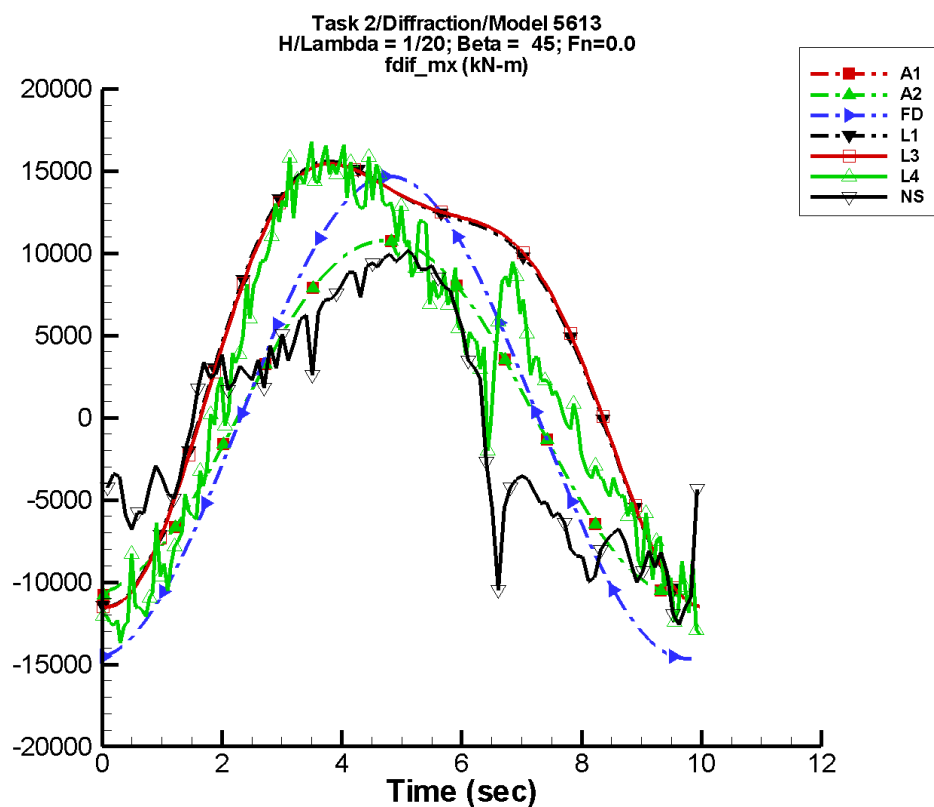
Table G–1843. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-860.	8.84E+05	-113	432.	-142
A2	-860.	8.84E+05	-113	432.	-142
FD	124.	7.54E+05	-127	319.	-92
L1	-4.04E+04	8.02E+05	-99	7.14E+03	43
L3	-4.04E+04	8.02E+05	-100	7.13E+03	43
L4	-3.44E+04	6.04E+05	-106	8.77E+04	-10
NF	—	—	—	—	—
NS	-4.14E+04	5.46E+05	-134	5.67E+04	-52

Table G–1844. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-8.87E+05	8.86E+05	-8.75E+05	8.76E+05
A2	-8.87E+05	8.86E+05	-8.75E+05	8.76E+05
FD	-7.54E+05	7.54E+05	-7.46E+05	7.46E+05
L1	-8.36E+05	7.68E+05	-8.37E+05	7.65E+05
L3	-8.36E+05	7.68E+05	-8.36E+05	7.65E+05
L4	-6.80E+05	9.55E+05	-6.66E+05	8.22E+05
NF	—	—	—	—
NS	-6.28E+05	7.73E+05	-6.00E+05	6.12E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–923. Time history of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
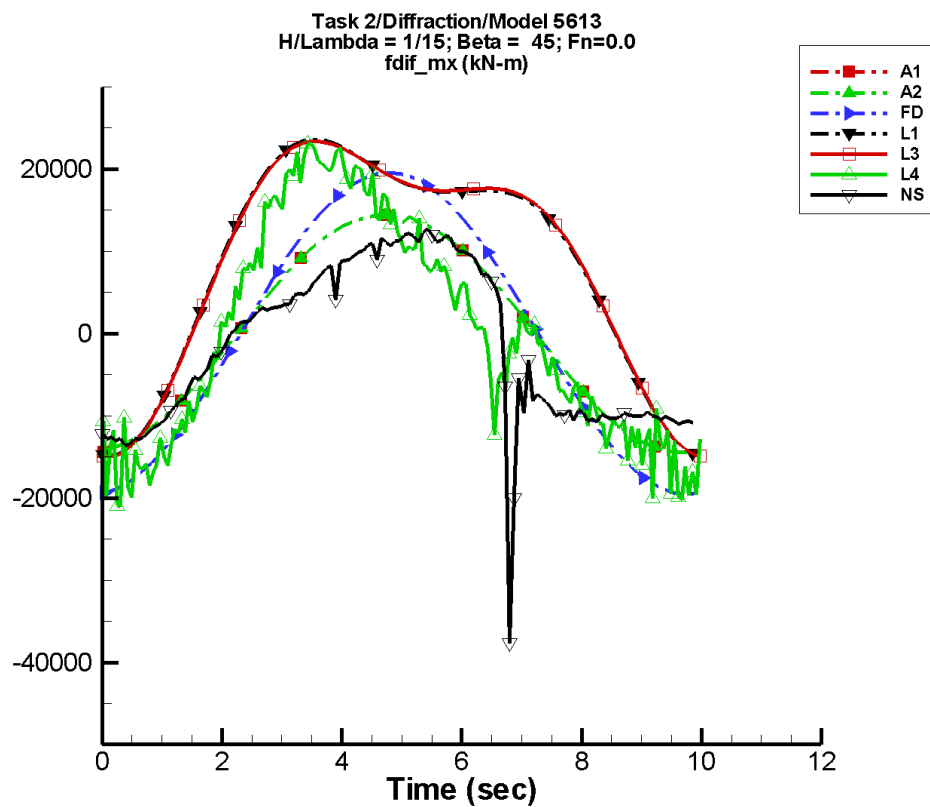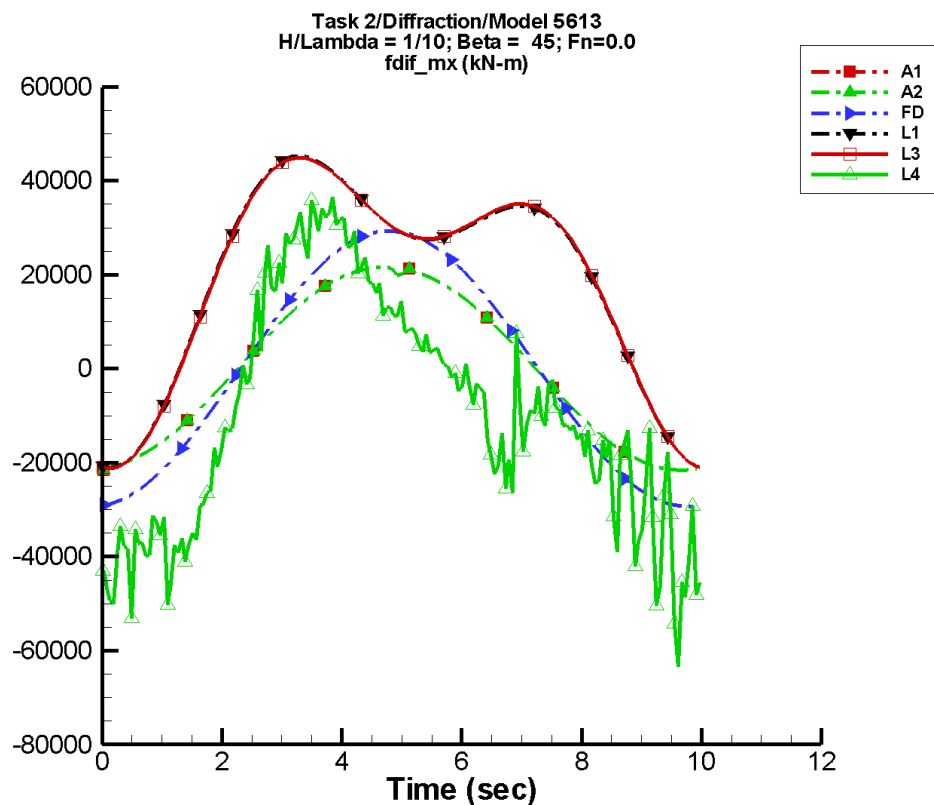
Table G–1845. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-1.15E+03	1.18E+06	-113	577.	-142
A2	-1.15E+03	1.18E+06	-113	577.	-142
FD	166.	1.01E+06	-127	425.	-92
L1	-7.21E+04	1.07E+06	-99	1.29E+04	45
L3	-7.21E+04	1.07E+06	-100	1.29E+04	45
L4	-2.58E+04	6.86E+05	-108	9.99E+04	-9
NF	—	—	—	—	—
NS	-3.12E+04	5.87E+05	-142	5.15E+04	-90

Table G–1846. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.18E+06	1.18E+06	-1.17E+06	1.17E+06
A2	-1.18E+06	1.18E+06	-1.17E+06	1.17E+06
FD	-1.01E+06	1.00E+06	-9.95E+05	9.95E+05
L1	-1.13E+06	1.01E+06	-1.13E+06	1.00E+06
L3	-1.13E+06	1.01E+06	-1.13E+06	1.00E+06
L4	-7.56E+05	9.06E+05	-7.17E+05	8.76E+05
NF	—	—	—	—
NS	-6.57E+05	7.72E+05	-6.41E+05	6.88E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–924. Time history of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
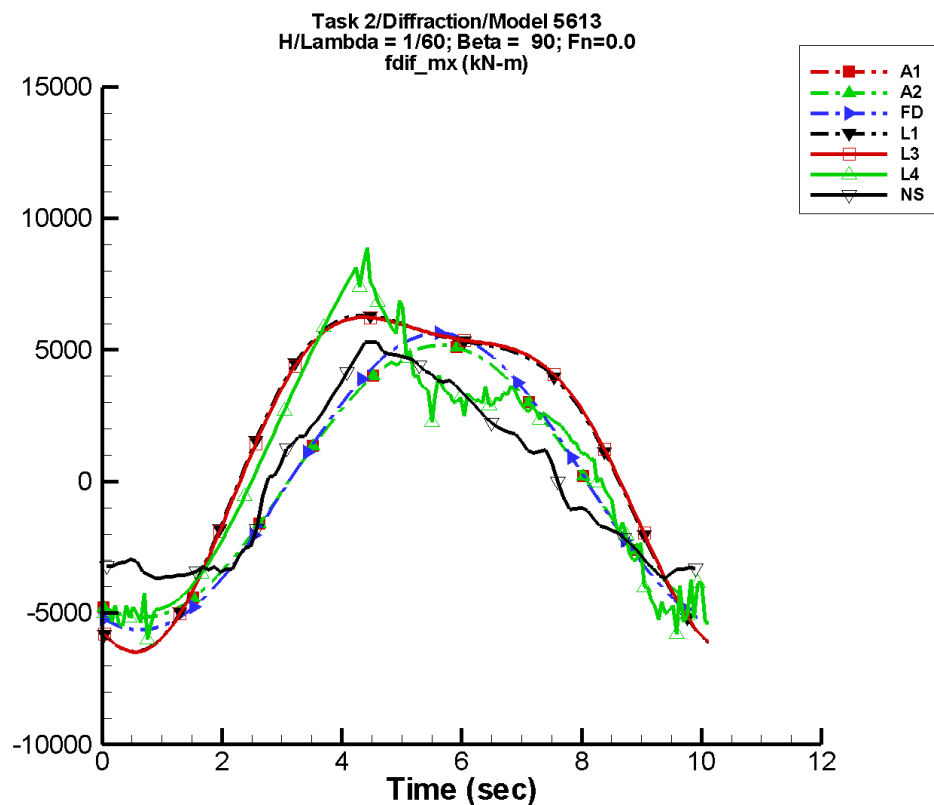
Table G–1847. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-1.72E+03	1.77E+06	-113	866.	-142
A2	-1.72E+03	1.77E+06	-113	866.	-142
FD	249.	1.51E+06	-127	637.	-92
L1	-1.63E+05	1.60E+06	-99	2.94E+04	46
L3	-1.63E+05	1.60E+06	-100	2.94E+04	46
L4	2.11E+03	7.62E+05	-109	1.14E+05	26
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1848. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.78E+06	1.77E+06	-1.75E+06	1.75E+06
A2	-1.78E+06	1.77E+06	-1.75E+06	1.75E+06
FD	-1.51E+06	1.51E+06	-1.49E+06	1.49E+06
L1	-1.74E+06	1.47E+06	-1.74E+06	1.46E+06
L3	-1.74E+06	1.47E+06	-1.74E+06	1.46E+06
L4	-8.05E+05	1.13E+06	-7.45E+05	1.04E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–925. Time history of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
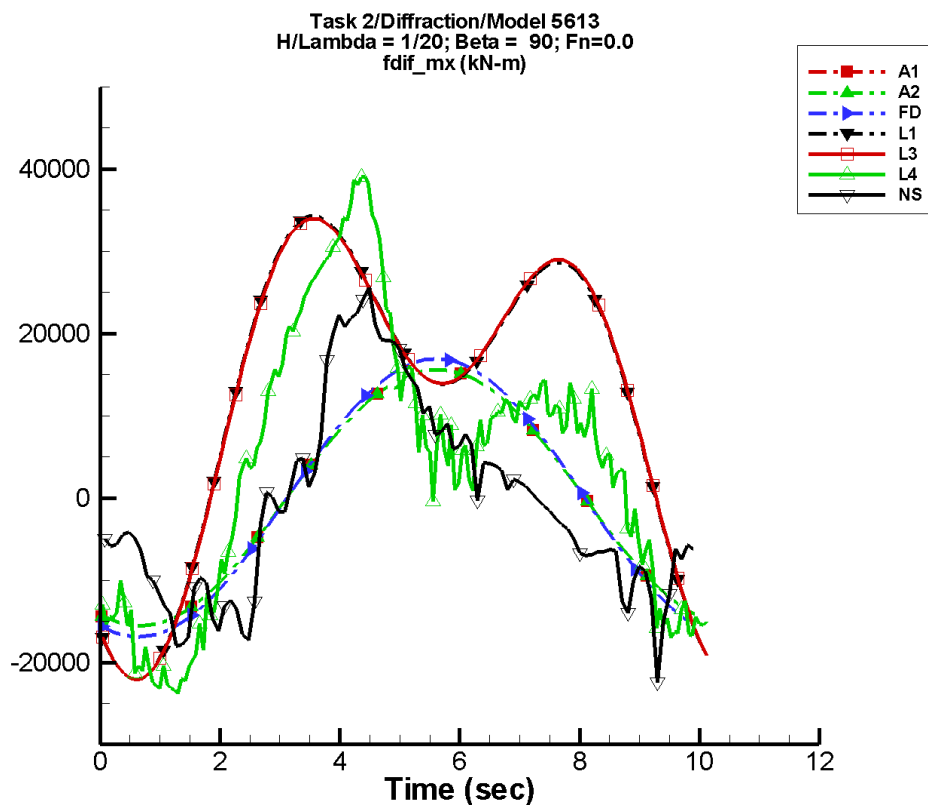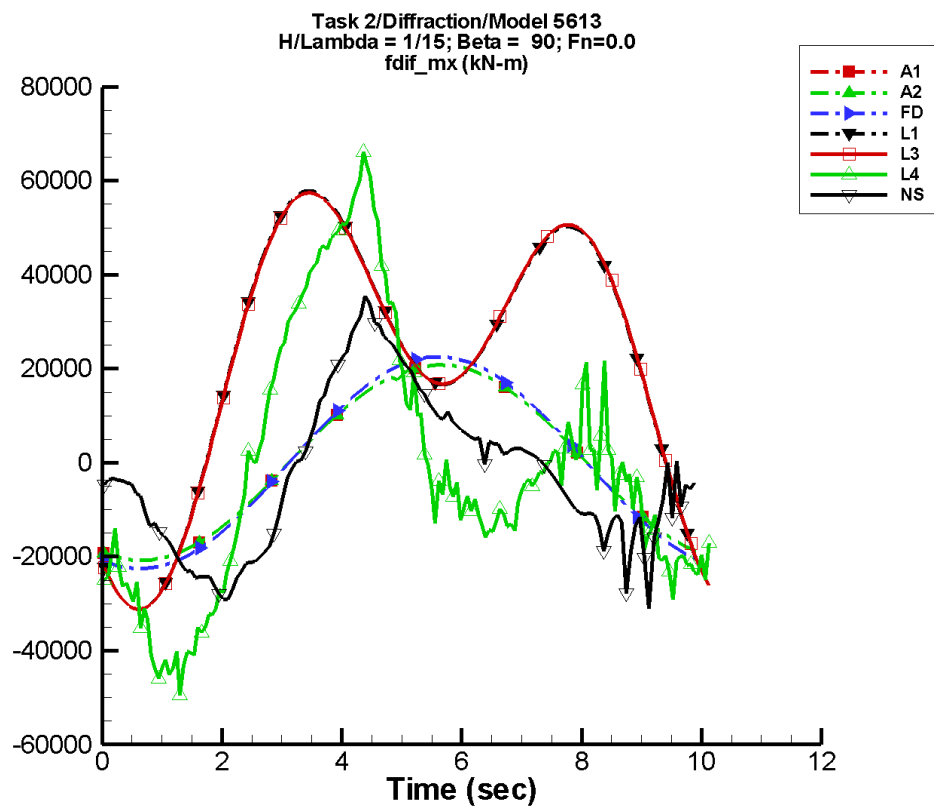
Table G–1849. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-161.	3.12E+05	-128	169.	159
A2	-161.	3.12E+05	-128	169.	159
FD	6.03	2.76E+05	-145	114.	-113
L1	-1.65E+03	2.81E+05	-112	2.73E+03	152
L3	-1.65E+03	2.81E+05	-113	2.73E+03	152
L4	-3.78E+03	2.57E+05	-116	1.92E+04	-75
NF	—	—	—	—	—
NS	-3.74E+03	2.18E+05	-141	3.04E+03	-29

Table G–1850. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.13E+05	3.13E+05	-3.11E+05	3.10E+05
A2	-3.13E+05	3.13E+05	-3.11E+05	3.10E+05
FD	-2.76E+05	2.76E+05	-2.73E+05	2.73E+05
L1	-2.84E+05	2.79E+05	-2.83E+05	2.78E+05
L3	-2.84E+05	2.79E+05	-2.83E+05	2.78E+05
L4	-2.69E+05	2.68E+05	-2.67E+05	2.58E+05
NF	—	—	—	—
NS	-2.21E+05	2.20E+05	-2.18E+05	2.17E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–926. Time history of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
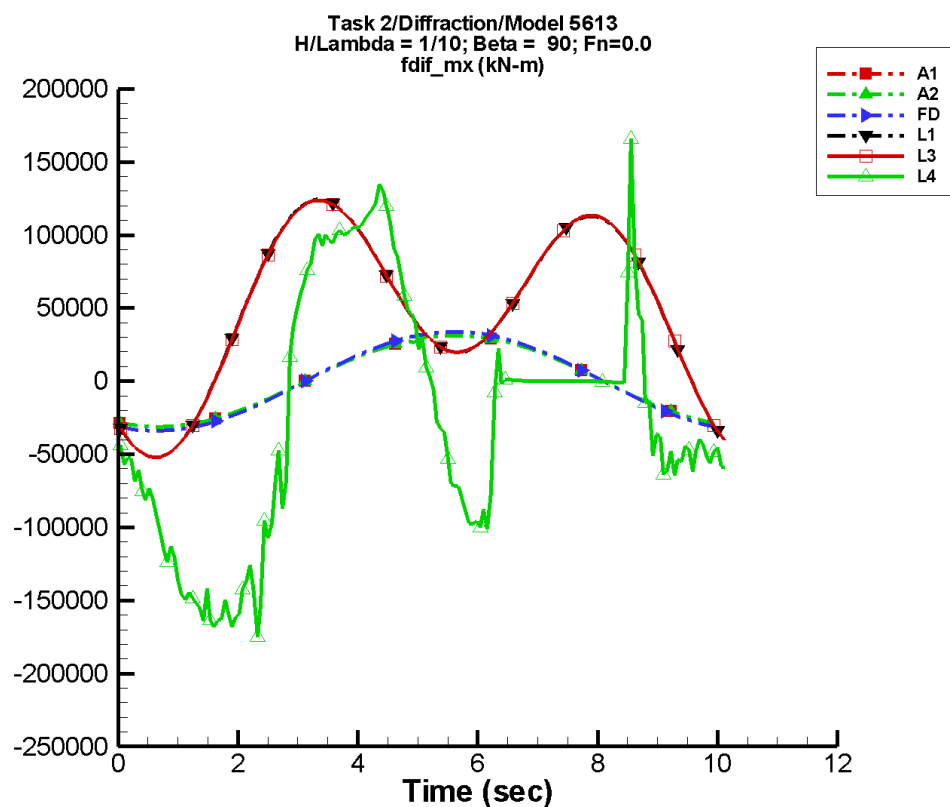
Table G–1851. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-485.	9.40E+05	-128	508.	159
A2	-485.	9.40E+05	-128	508.	159
FD	18.1	8.27E+05	-145	343.	-113
L1	-1.51E+04	8.44E+05	-112	2.54E+04	152
L3	-1.51E+04	8.43E+05	-113	2.54E+04	152
L4	-6.00E+03	6.66E+05	-120	1.03E+05	-98
NF	—	—	—	—	—
NS	-3.92E+04	5.87E+05	-145	4.57E+04	-106

Table G–1852. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-9.43E+05	9.42E+05	-9.34E+05	9.33E+05
A2	-9.43E+05	9.42E+05	-9.34E+05	9.33E+05
FD	-8.27E+05	8.27E+05	-8.19E+05	8.19E+05
L1	-8.67E+05	8.23E+05	-8.64E+05	8.20E+05
L3	-8.68E+05	8.22E+05	-8.65E+05	8.19E+05
L4	-7.43E+05	8.37E+05	-7.31E+05	7.52E+05
NF	—	—	—	—
NS	-6.80E+05	8.20E+05	-6.34E+05	6.63E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–927. Time history of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
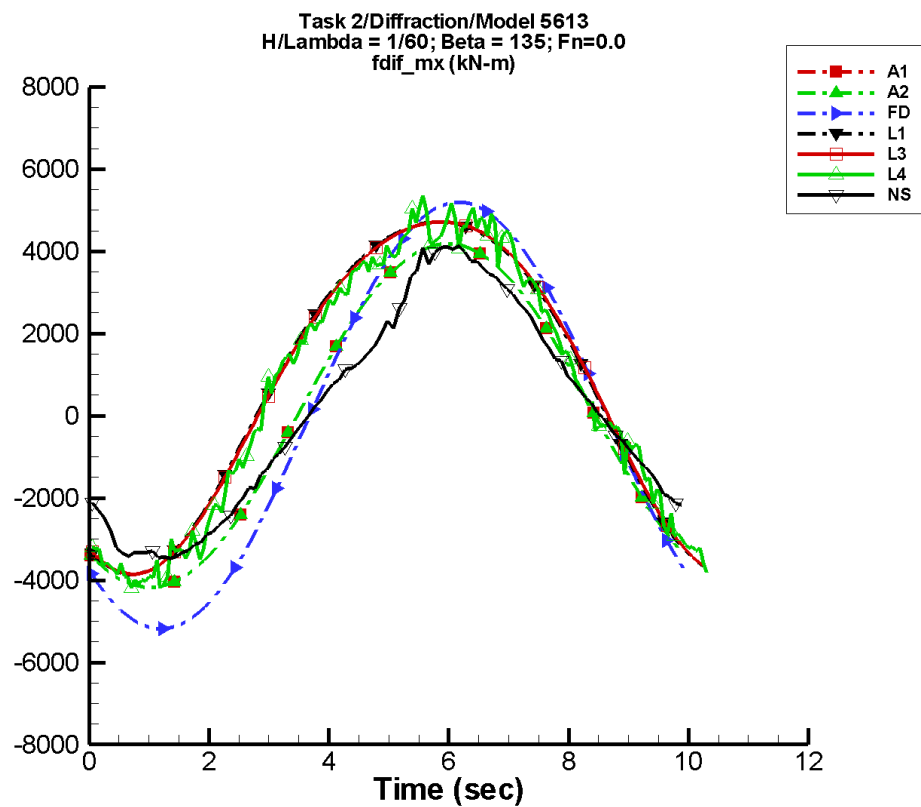
Table G–1853. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-647.	1.25E+06	-128	678.	159
A2	-647.	1.25E+06	-128	678.	159
FD	24.2	1.10E+06	-145	458.	-113
L1	-2.70E+04	1.12E+06	-112	4.53E+04	152
L3	-2.70E+04	1.12E+06	-113	4.53E+04	152
L4	1.17E+04	8.27E+05	-123	1.22E+05	-112
NF	—	—	—	—	—
NS	-1.67E+04	6.27E+05	-147	4.19E+04	-145

Table G–1854. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

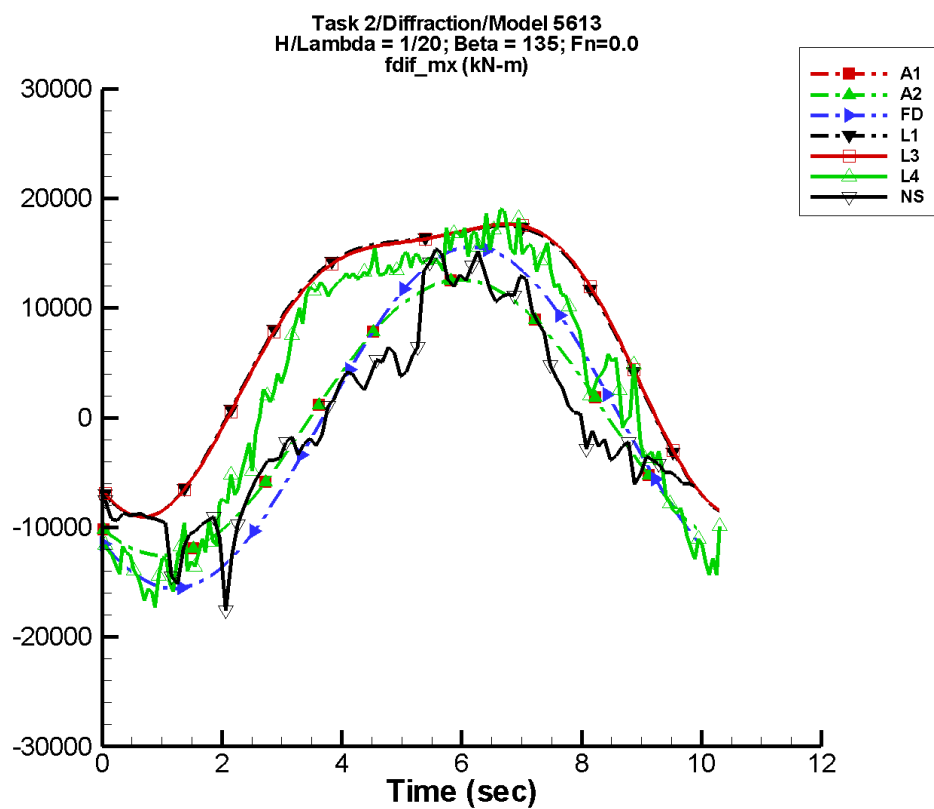| Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.26E+06	1.26E+06	-1.25E+06	1.25E+06
A2	-1.26E+06	1.26E+06	-1.25E+06	1.25E+06
FD	-1.10E+06	1.10E+06	-1.09E+06	1.09E+06
L1	-1.17E+06	1.09E+06	-1.16E+06	1.08E+06
L3	-1.17E+06	1.09E+06	-1.16E+06	1.08E+06
L4	-9.39E+05	1.10E+06	-9.27E+05	1.01E+06
NF	—	—	—	—
NS	-6.92E+05	1.33E+06	-6.56E+05	7.66E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–928. Time history of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
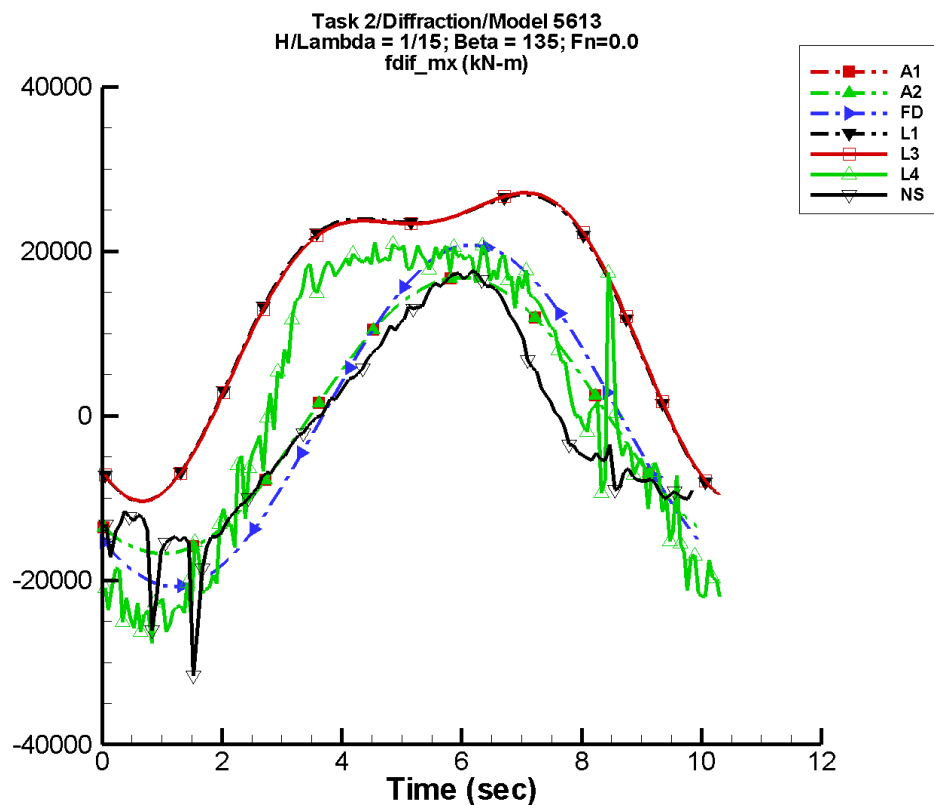
Table G–1855. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-971.	1.88E+06	-128	1.02E+03	159
A2	-971.	1.88E+06	-128	1.02E+03	159
FD	36.3	1.65E+06	-145	687.	-113
L1	-6.08E+04	1.69E+06	-112	1.02E+05	152
L3	-6.09E+04	1.69E+06	-113	1.02E+05	152
L4	8.98E+04	1.04E+06	-128	4.35E+04	161
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1856. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.89E+06	1.89E+06	-1.87E+06	1.87E+06
A2	-1.89E+06	1.89E+06	-1.87E+06	1.87E+06
FD	-1.65E+06	1.65E+06	-1.64E+06	1.64E+06
L1	-1.79E+06	1.61E+06	-1.78E+06	1.60E+06
L3	-1.79E+06	1.61E+06	-1.78E+06	1.60E+06
L4	-1.38E+06	1.42E+06	-1.28E+06	1.35E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–929. Time history of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
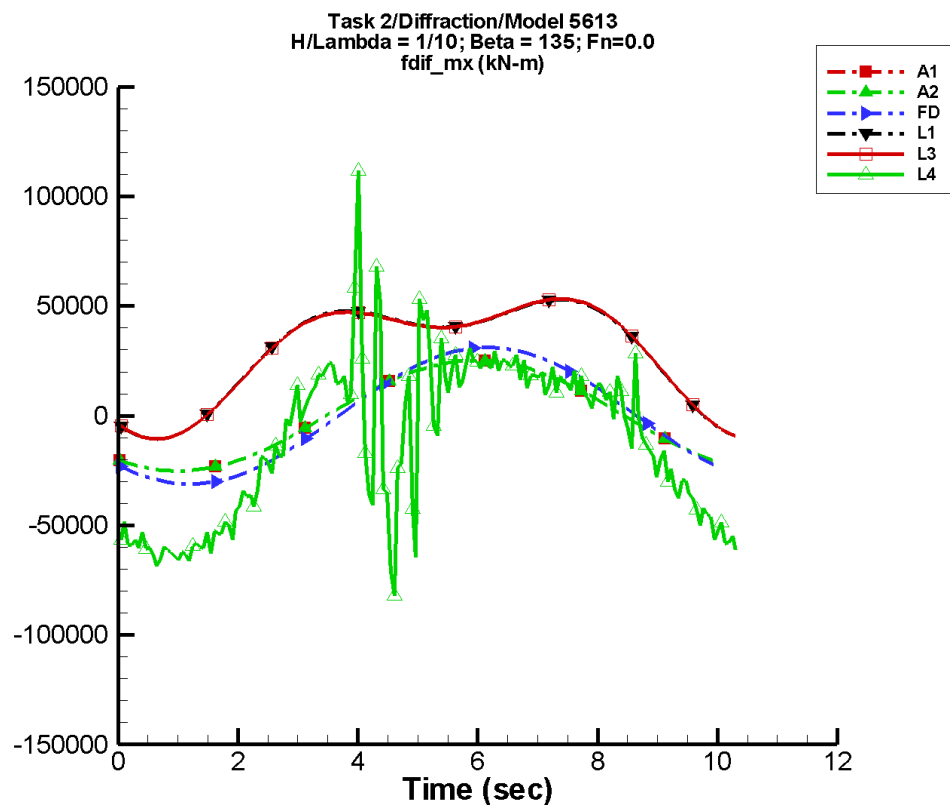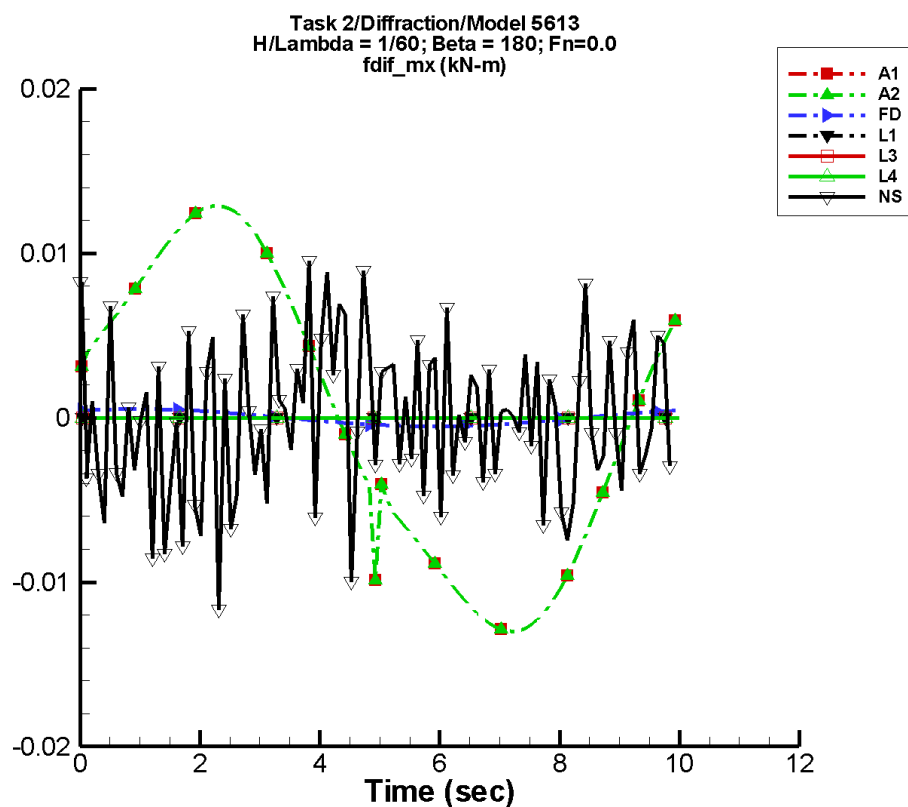
Table G–1857. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	350.	1.23E+05	135	329.	100
A2	350.	1.23E+05	135	329.	100
FD	-65.1	1.41E+05	126	66.7	157
L1	-1.39E+03	1.14E+05	152	978.	169
L3	-1.39E+03	1.14E+05	151	977.	169
L4	-3.01E+03	9.54E+04	153	1.34E+04	55
NF	—	—	—	—	—
NS	-3.35E+03	7.99E+04	135	1.55E+03	-78

Table G–1858. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.23E+05	1.24E+05	-1.21E+05	1.22E+05
A2	-1.23E+05	1.24E+05	-1.21E+05	1.22E+05
FD	-1.41E+05	1.41E+05	-1.40E+05	1.40E+05
L1	-1.15E+05	1.14E+05	-1.16E+05	1.13E+05
L3	-1.15E+05	1.14E+05	-1.16E+05	1.13E+05
L4	-1.07E+05	9.80E+04	-1.07E+05	8.50E+04
NF	—	—	—	—
NS	-8.71E+04	8.51E+04	-8.53E+04	7.86E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.0
fdif_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–930. Time history of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1859. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
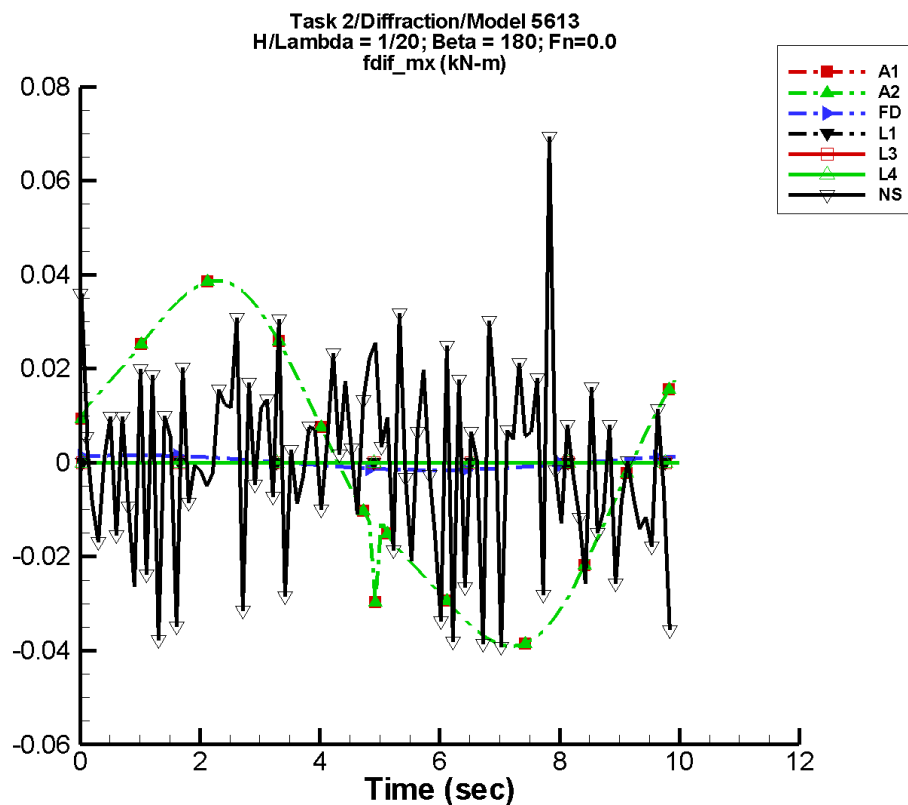
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.05E+03	3.69E+05	135	991.	100
A2	1.05E+03	3.69E+05	135	991.	100
FD	-195.	4.23E+05	126	200.	157
L1	-1.27E+04	3.43E+05	152	8.54E+03	170
L3	-1.27E+04	3.43E+05	151	8.54E+03	170
L4	-1.07E+04	2.16E+05	156	8.45E+04	54
NF	—	—	—	—	—
NS	-3.79E+04	1.90E+05	128	3.78E+04	52

Table G–1860. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

| | Unfiltered | | Filtered | |
Code	Minimum (kN-m)	Maximum (kN-m)	Minimum (kN-m)	Maximum (kN-m)
A1	-3.69E+05	3.72E+05	-3.65E+05	3.68E+05
A2	-3.69E+05	3.72E+05	-3.65E+05	3.68E+05
FD	-4.23E+05	4.23E+05	-4.19E+05	4.19E+05
L1	-3.50E+05	3.37E+05	-3.52E+05	3.35E+05
L3	-3.50E+05	3.37E+05	-3.52E+05	3.35E+05
L4	-2.81E+05	2.98E+05	-2.70E+05	2.65E+05
NF	—	—	—	—
NS	-3.79E+05	3.59E+05	-2.78E+05	2.38E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–931. Time history of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
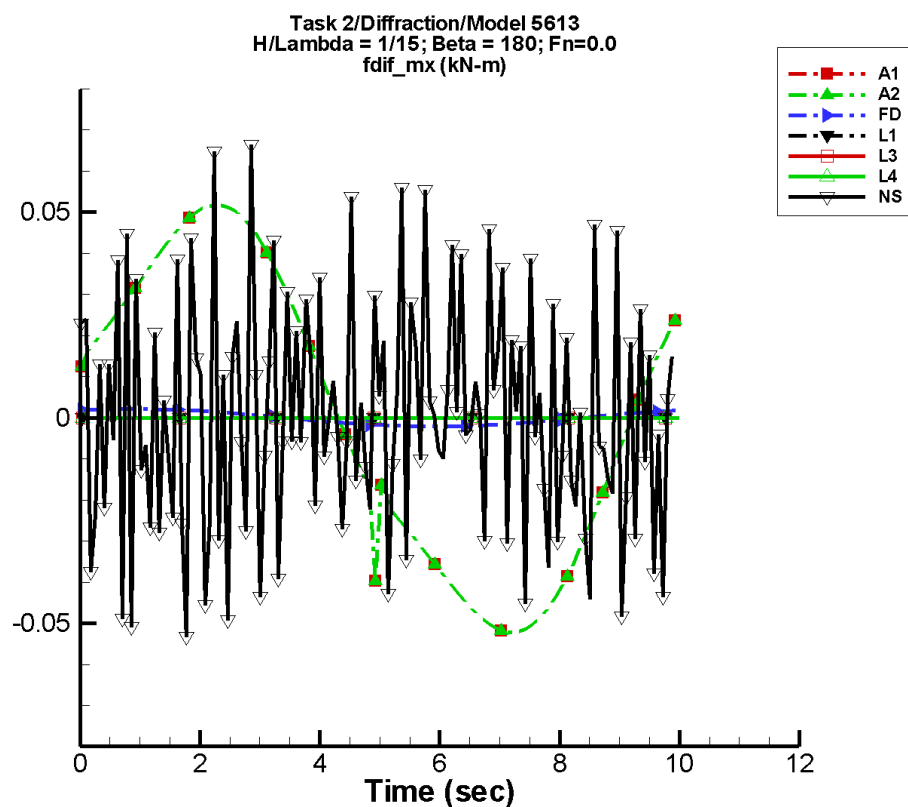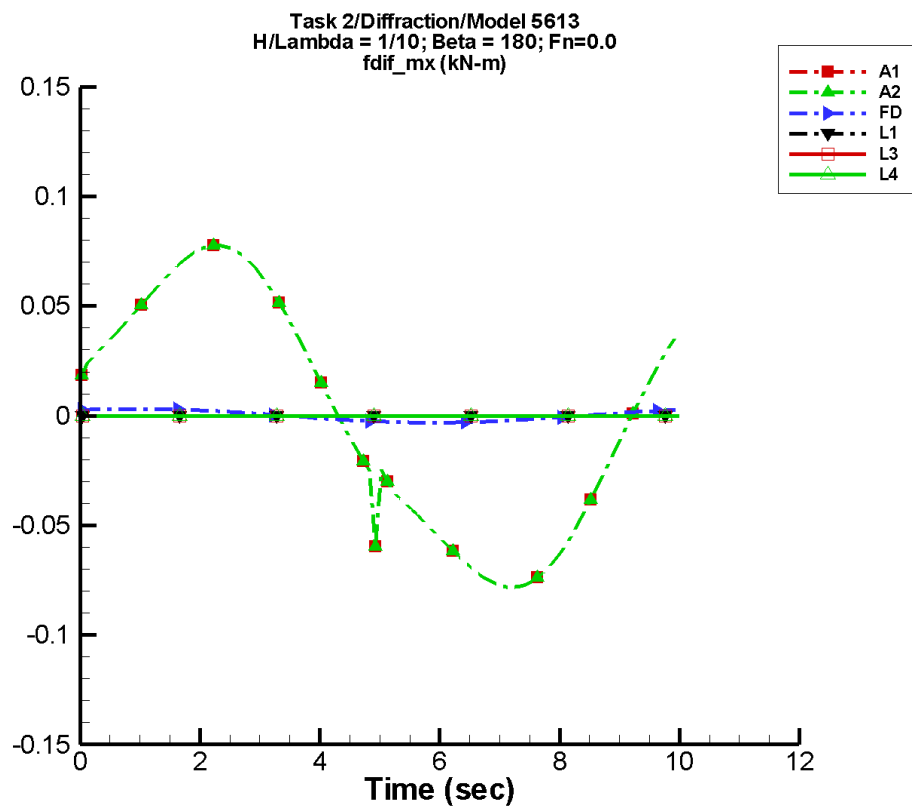
Table G–1861. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.41E+03	4.93E+05	135	1.32E+03	100
A2	1.41E+03	4.93E+05	135	1.32E+03	100
FD	-260.	5.64E+05	126	267.	157
L1	-2.26E+04	4.57E+05	152	1.51E+04	170
L3	-2.26E+04	4.57E+05	151	1.51E+04	170
L4	-1.91E+04	2.45E+05	158	1.33E+05	54
NF	—	—	—	—	—
NS	-4.14E+03	1.08E+05	113	1.93E+04	69

Table G–1862. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-4.92E+05	4.96E+05	-4.87E+05	4.91E+05
A2	-4.92E+05	4.96E+05	-4.87E+05	4.91E+05
FD	-5.64E+05	5.64E+05	-5.59E+05	5.59E+05
L1	-4.70E+05	4.46E+05	-4.72E+05	4.44E+05
L3	-4.69E+05	4.46E+05	-4.72E+05	4.44E+05
L4	-3.53E+05	4.29E+05	-3.35E+05	3.82E+05
NF	—	—	—	—
NS	-1.89E+05	6.82E+05	-1.65E+05	2.59E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–932. Time history of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
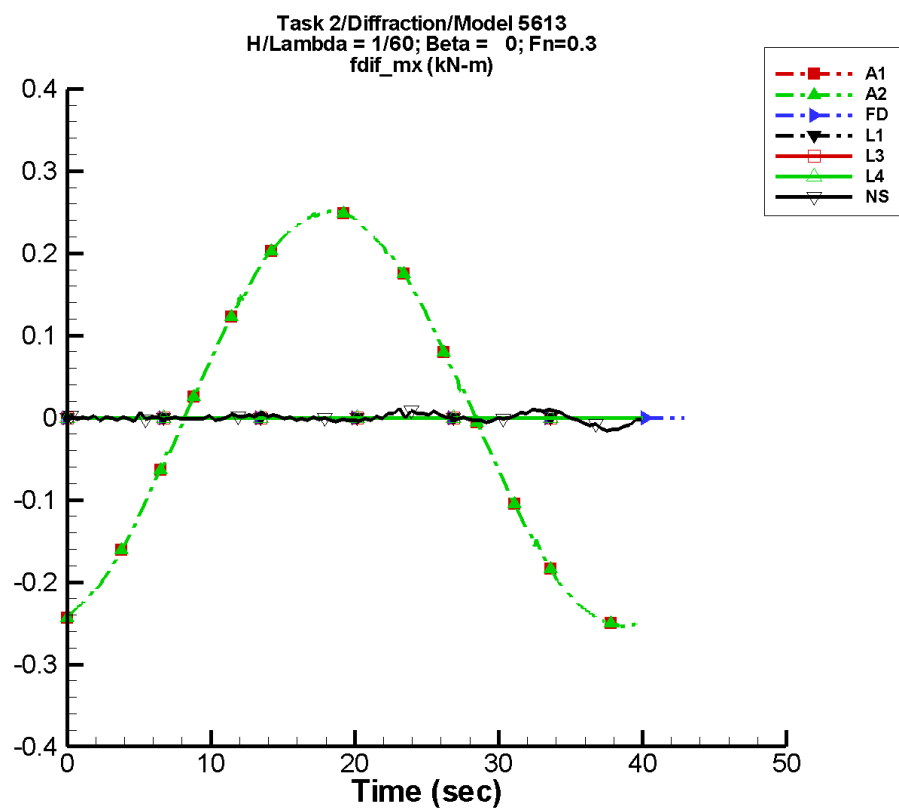
Table G–1863. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.11E+03	7.40E+05	135	1.98E+03	100
A2	2.11E+03	7.40E+05	135	1.98E+03	100
FD	-390.	8.46E+05	126	400.	157
L1	-5.10E+04	6.86E+05	152	3.39E+04	170
L3	-5.10E+04	6.86E+05	151	3.39E+04	170
L4	3.37E+04	8.84E+04	128	4.53E+04	109
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1864. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-7.39E+05	7.44E+05	-7.31E+05	7.36E+05
A2	-7.39E+05	7.44E+05	-7.31E+05	7.36E+05
FD	-8.46E+05	8.47E+05	-8.38E+05	8.38E+05
L1	-7.15E+05	6.61E+05	-7.17E+05	6.58E+05
L3	-7.14E+05	6.61E+05	-7.17E+05	6.58E+05
L4	-1.28E+06	1.58E+06	-4.43E+05	6.43E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–933. Time history of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
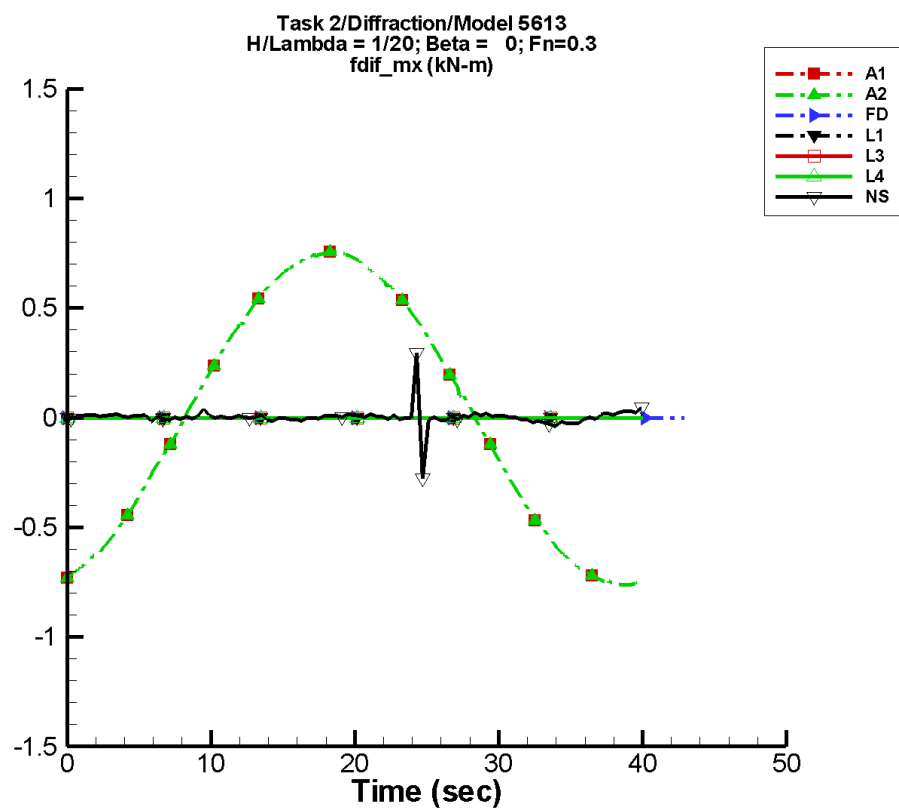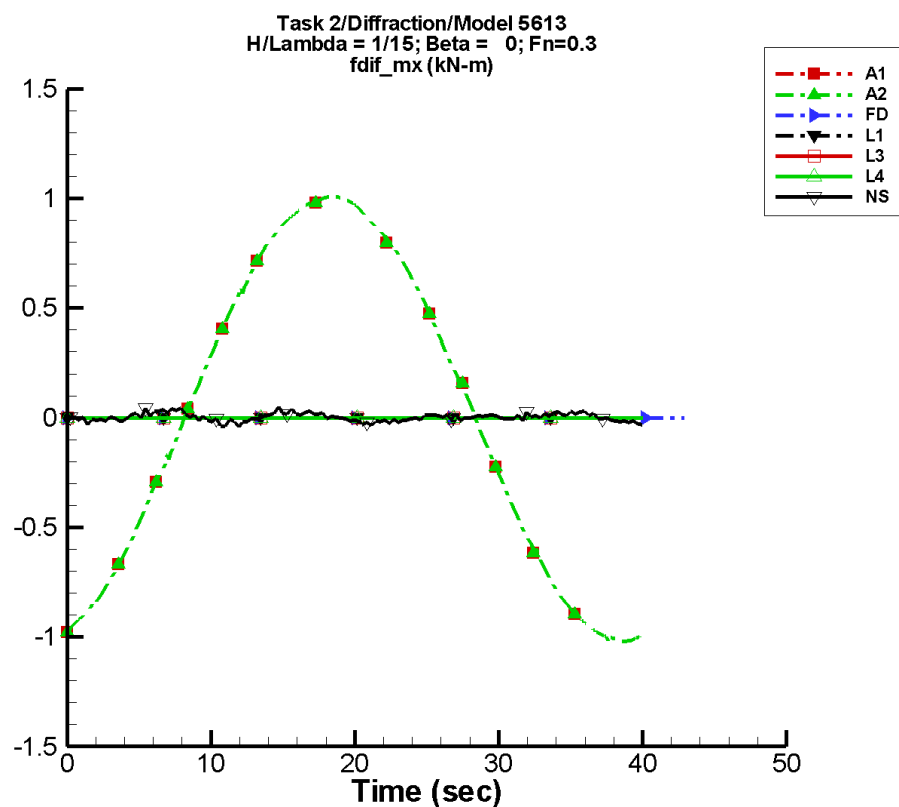
Table G–1865. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	255.	3.41E+05	50	234.	43
A2	255.	3.41E+05	50	234.	43
FD	6.66	2.76E+05	29	115.	61
L1	-3.97E+03	3.08E+05	70	3.38E+03	-25
L3	-3.96E+03	3.08E+05	69	3.39E+03	-25
L4	-1.54E+04	2.70E+05	68	1.94E+04	-175
NF	—	—	—	—	—
NS	-2.47E+03	2.15E+05	46	2.77E+03	162

Table G–1866. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.42E+05	3.44E+05	-3.38E+05	3.41E+05
A2	-3.42E+05	3.44E+05	-3.38E+05	3.41E+05
FD	-2.76E+05	2.76E+05	-2.74E+05	2.74E+05
L1	-3.11E+05	3.05E+05	-3.10E+05	3.04E+05
L3	-3.11E+05	3.05E+05	-3.10E+05	3.04E+05
L4	-2.94E+05	2.36E+05	-2.92E+05	2.34E+05
NF	—	—	—	—
NS	-2.16E+05	2.10E+05	-2.14E+05	2.08E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–934. Time history of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
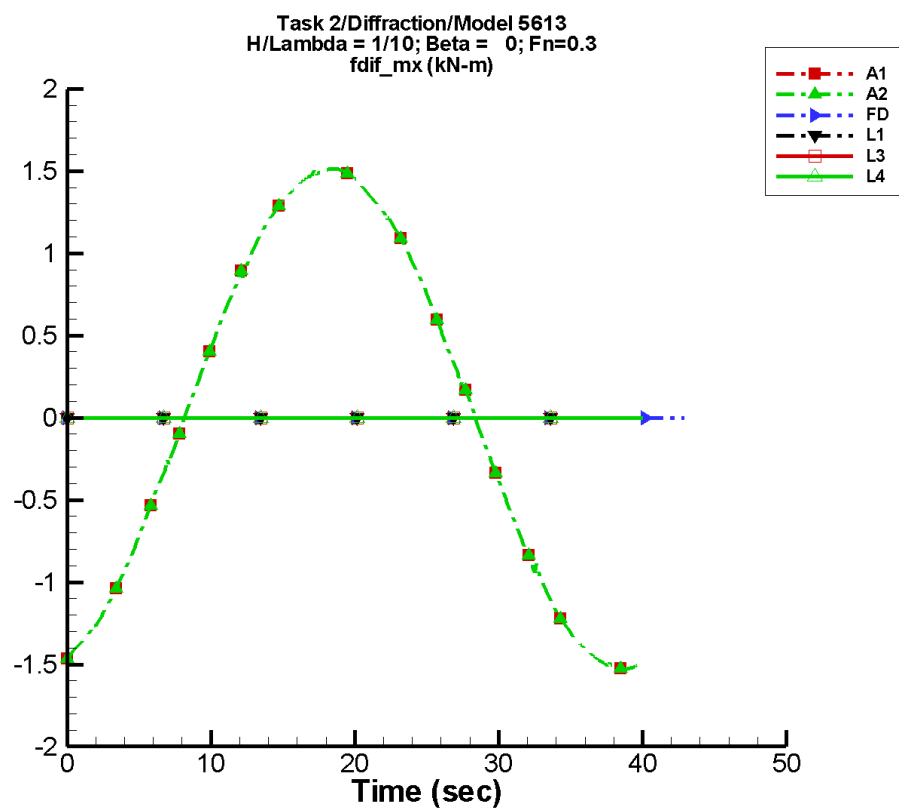
Table G–1867. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	766.	1.03E+06	50	703.	43
A2	766.	1.03E+06	50	703.	43
FD	20.1	8.29E+05	29	344.	61
L1	-3.39E+04	9.24E+05	70	3.02E+04	-28
L3	-3.39E+04	9.24E+05	69	3.03E+04	-28
L4	-1.26E+05	6.57E+05	60	9.36E+04	-152
NF	—	—	—	—	—
NS	-3.55E+04	5.72E+05	43	5.48E+04	-135

Table G–1868. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.03E+06	1.03E+06	-1.02E+06	1.03E+06
A2	-1.03E+06	1.03E+06	-1.02E+06	1.03E+06
FD	-8.29E+05	8.29E+05	-8.21E+05	8.21E+05
L1	-9.53E+05	8.99E+05	-9.50E+05	8.95E+05
L3	-9.52E+05	9.00E+05	-9.49E+05	8.96E+05
L4	-8.49E+05	4.74E+05	-8.44E+05	4.58E+05
NF	—	—	—	—
NS	-6.80E+05	6.66E+05	-6.39E+05	5.27E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–935. Time history of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
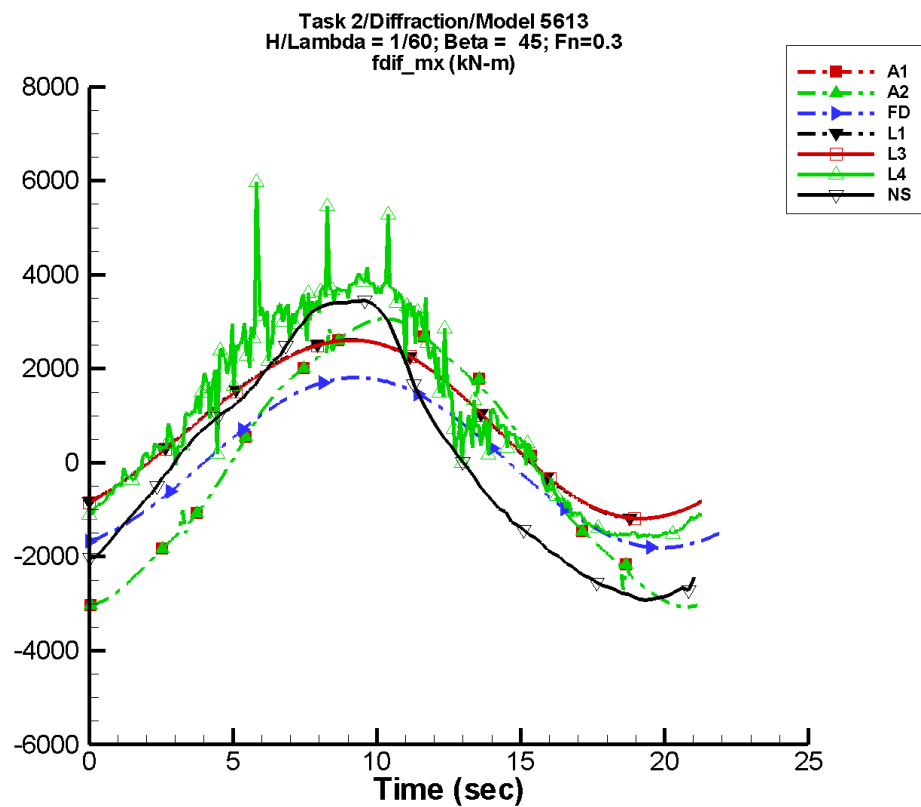
Table G–1869. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
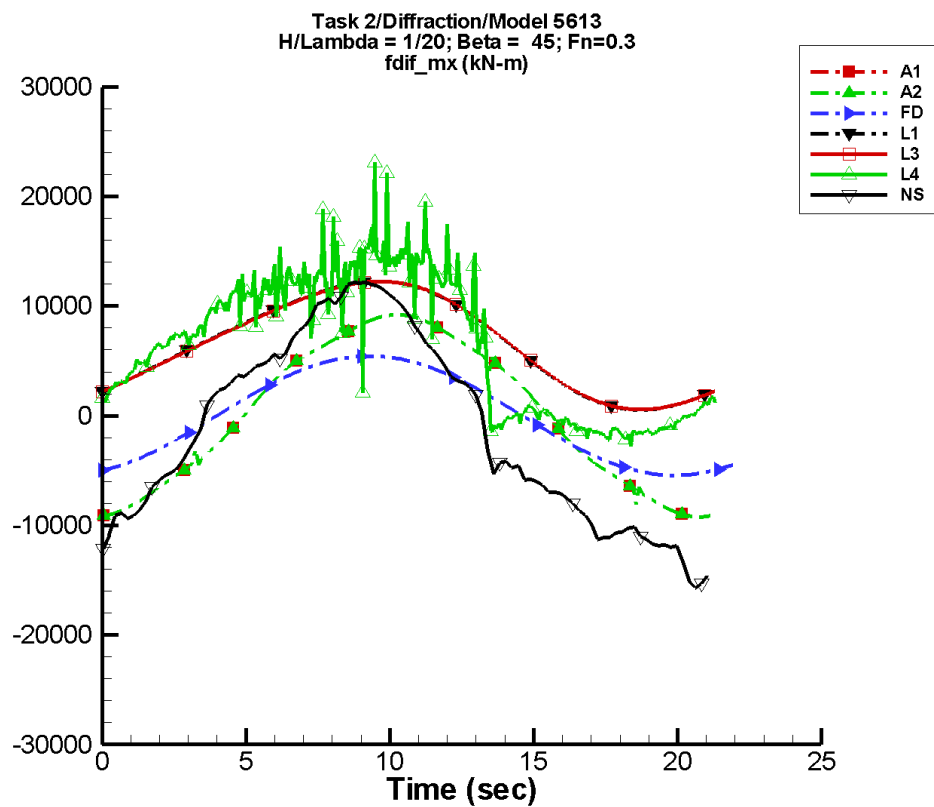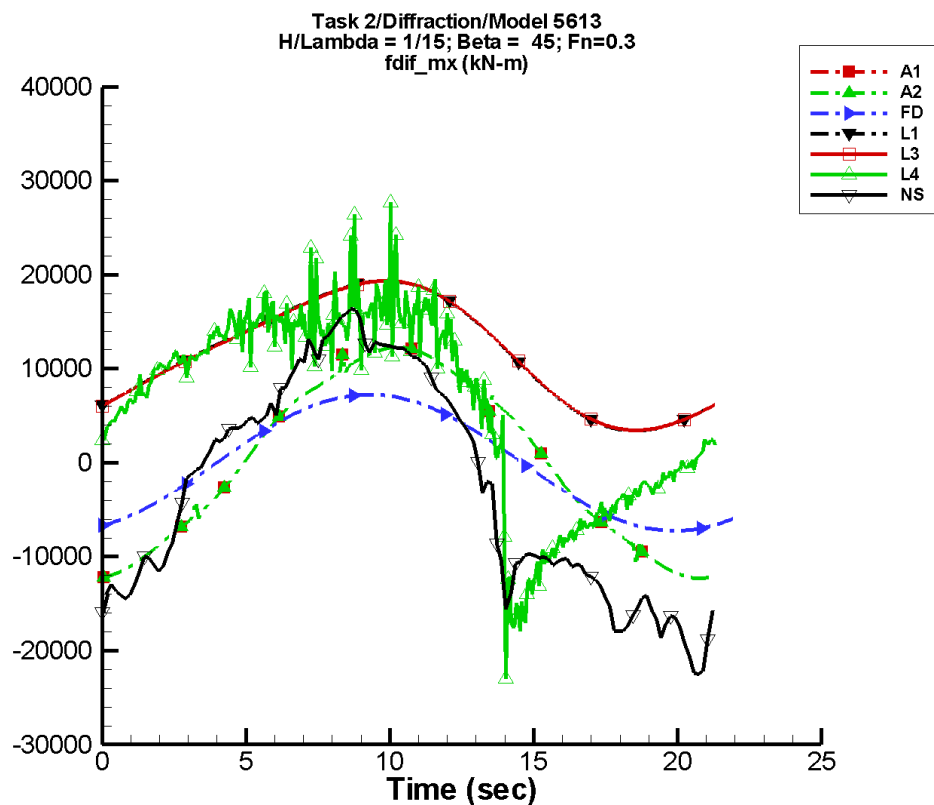
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.02E+03	1.37E+06	50	939.	43
A2	1.02E+03	1.37E+06	50	939.	43
FD	26.7	1.11E+06	29	459.	61
L1	-5.98E+04	1.23E+06	70	5.37E+04	-28
L3	-5.98E+04	1.23E+06	69	5.38E+04	-28
L4	-2.16E+05	8.40E+05	54	1.10E+05	-145
NF	—	—	—	—	—
NS	-1.40E+04	6.21E+05	44	3.71E+04	-78

Table G–1870. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.37E+06	1.38E+06	-1.36E+06	1.37E+06
A2	-1.37E+06	1.38E+06	-1.36E+06	1.37E+06
FD	-1.11E+06	1.11E+06	-1.09E+06	1.09E+06
L1	-1.28E+06	1.19E+06	-1.28E+06	1.18E+06
L3	-1.28E+06	1.19E+06	-1.28E+06	1.19E+06
L4	-1.17E+06	6.06E+05	-1.15E+06	5.79E+05
NF	—	—	—	—
NS	-6.69E+05	9.10E+05	-6.48E+05	6.80E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 135; Fn=0.0
fdif_my (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–936. Time history of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
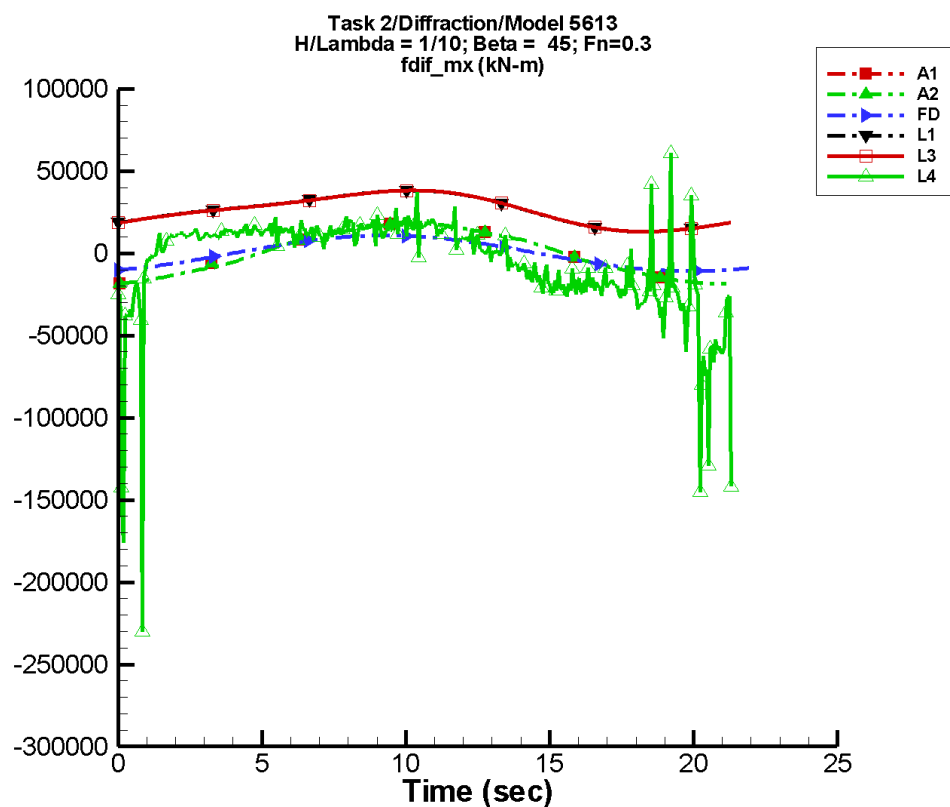
Table G–1871. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.53E+03	2.06E+06	50	1.41E+03	43
A2	1.53E+03	2.06E+06	50	1.41E+03	43
FD	40.1	1.66E+06	29	688.	61
L1	-1.34E+05	1.85E+06	70	1.21E+05	-29
L3	-1.34E+05	1.85E+06	69	1.21E+05	-29
L4	-2.53E+05	1.02E+06	52	1.47E+05	174
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1872. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.06E+06	2.07E+06	-2.04E+06	2.05E+06
A2	-2.06E+06	2.07E+06	-2.04E+06	2.05E+06
FD	-1.66E+06	1.66E+06	-1.64E+06	1.64E+06
L1	-1.97E+06	1.75E+06	-1.97E+06	1.75E+06
L3	-1.97E+06	1.76E+06	-1.96E+06	1.75E+06
L4	-1.82E+06	8.51E+05	-1.77E+06	7.74E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–937. Time history of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
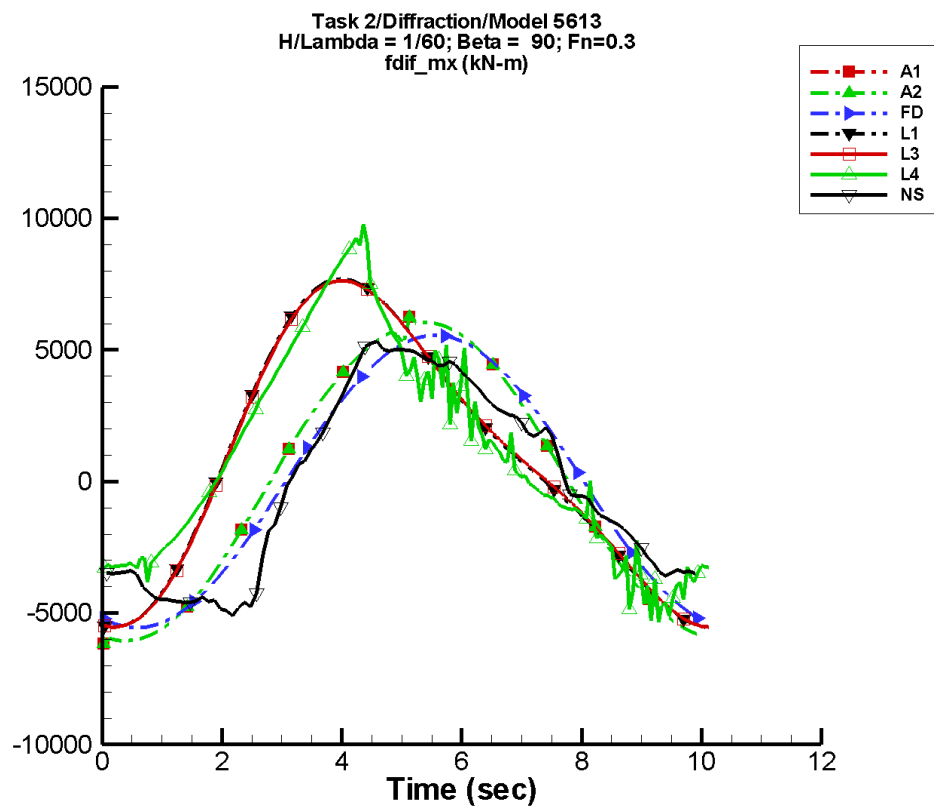
Table G–1873. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	53.1	3.24E+05	38	216.	17
A2	53.1	3.24E+05	38	216.	17
FD	44.9	2.64E+05	10	112.	40
L1	-1.95E+03	2.92E+05	58	509.	-174
L3	-1.94E+03	2.92E+05	57	504.	-174
L4	-1.19E+04	2.56E+05	59	2.24E+04	126
NF	—	—	—	—	—
NS	-2.93E+03	2.06E+05	35	1.76E+03	97

Table G–1874. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.24E+05	3.26E+05	-3.21E+05	3.22E+05
A2	-3.24E+05	3.26E+05	-3.21E+05	3.22E+05
FD	-2.64E+05	2.64E+05	-2.61E+05	2.61E+05
L1	-2.94E+05	2.89E+05	-2.93E+05	2.88E+05
L3	-2.94E+05	2.89E+05	-2.93E+05	2.88E+05
L4	-2.76E+05	2.64E+05	-2.75E+05	2.58E+05
NF	—	—	—	—
NS	-2.08E+05	2.00E+05	-2.05E+05	1.98E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–938. Time history of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
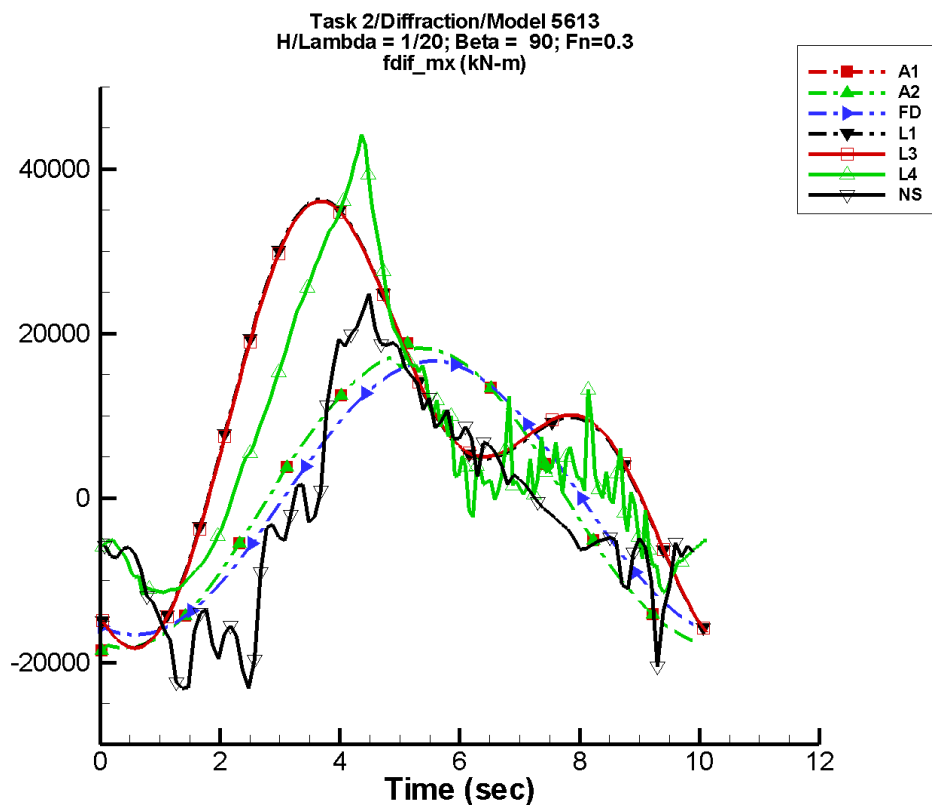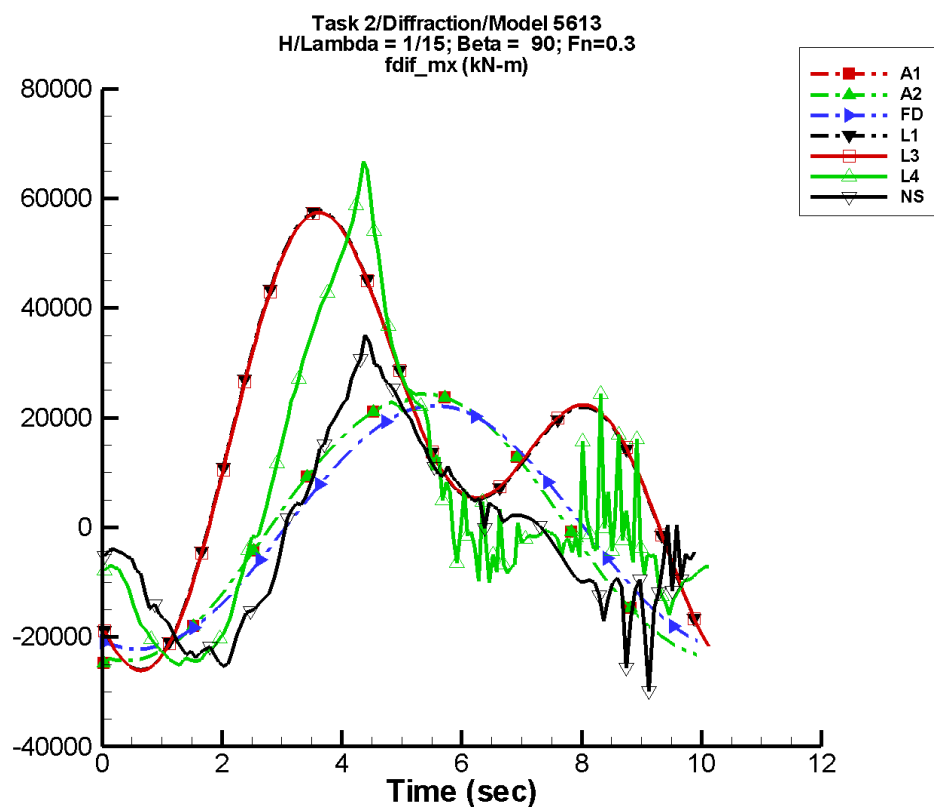
Table G–1875. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	160.	9.73E+05	38	648.	17
A2	160.	9.73E+05	38	648.	17
FD	135.	7.91E+05	10	335.	40
L1	-1.68E+04	8.75E+05	58	5.05E+03	-156
L3	-1.67E+04	8.75E+05	57	5.04E+03	-156
L4	-1.05E+05	5.64E+05	53	1.12E+05	161
NF	—	—	—	—	—
NS	-4.15E+04	5.10E+05	33	4.50E+04	156

Table G–1876. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-9.75E+05	9.79E+05	-9.64E+05	9.69E+05
A2	-9.75E+05	9.79E+05	-9.64E+05	9.69E+05
FD	-7.91E+05	7.91E+05	-7.83E+05	7.83E+05
L1	-8.97E+05	8.53E+05	-8.94E+05	8.50E+05
L3	-8.97E+05	8.53E+05	-8.94E+05	8.50E+05
L4	-7.62E+05	5.26E+05	-7.57E+05	4.70E+05
NF	—	—	—	—
NS	-5.69E+05	5.29E+05	-5.58E+05	4.62E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–939. Time history of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
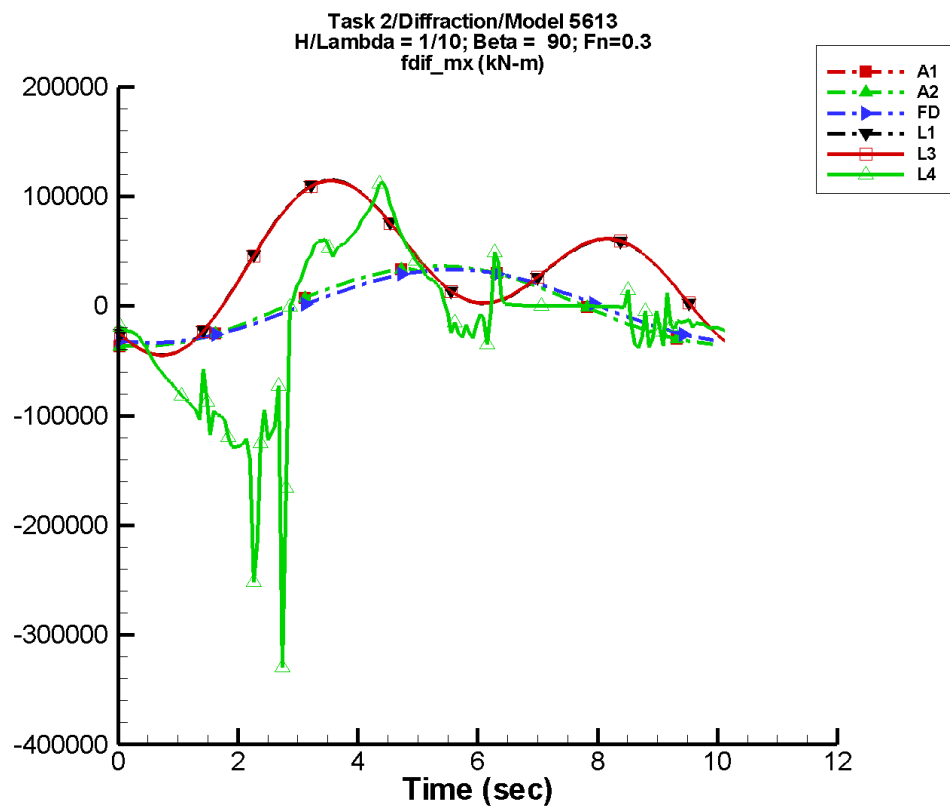
Table G–1877. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	214.	1.30E+06	38	865.	17
A2	214.	1.30E+06	38	865.	17
FD	180.	1.05E+06	10	446.	40
L1	-2.96E+04	1.17E+06	58	9.14E+03	-155
L3	-2.96E+04	1.17E+06	57	9.12E+03	-154
L4	-1.67E+05	6.80E+05	46	1.30E+05	170
NF	—	—	—	—	—
NS	-3.25E+04	5.66E+05	36	2.93E+04	-162

Table G–1878. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.30E+06	1.31E+06	-1.29E+06	1.29E+06
A2	-1.30E+06	1.31E+06	-1.29E+06	1.29E+06
FD	-1.05E+06	1.05E+06	-1.04E+06	1.04E+06
L1	-1.21E+06	1.13E+06	-1.20E+06	1.12E+06
L3	-1.21E+06	1.13E+06	-1.20E+06	1.12E+06
L4	-9.71E+05	4.44E+05	-9.65E+05	4.01E+05
NF	—	—	—	—
NS	-6.21E+05	8.01E+05	-6.09E+05	5.33E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–940. Time history of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
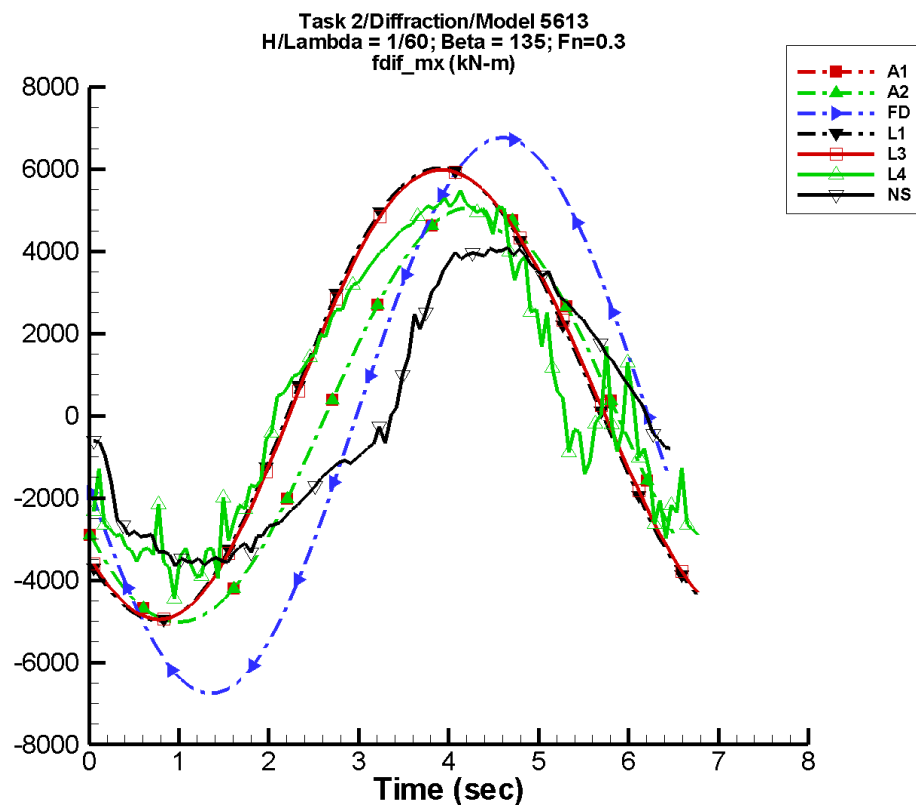
Table G–1879. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	320.	1.95E+06	38	1.30E+03	17
A2	320.	1.95E+06	38	1.30E+03	17
FD	270.	1.58E+06	10	670.	40
L1	-6.63E+04	1.75E+06	58	2.09E+04	-153
L3	-6.63E+04	1.75E+06	57	2.09E+04	-153
L4	-2.12E+05	8.17E+05	45	1.52E+05	-166
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1880. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
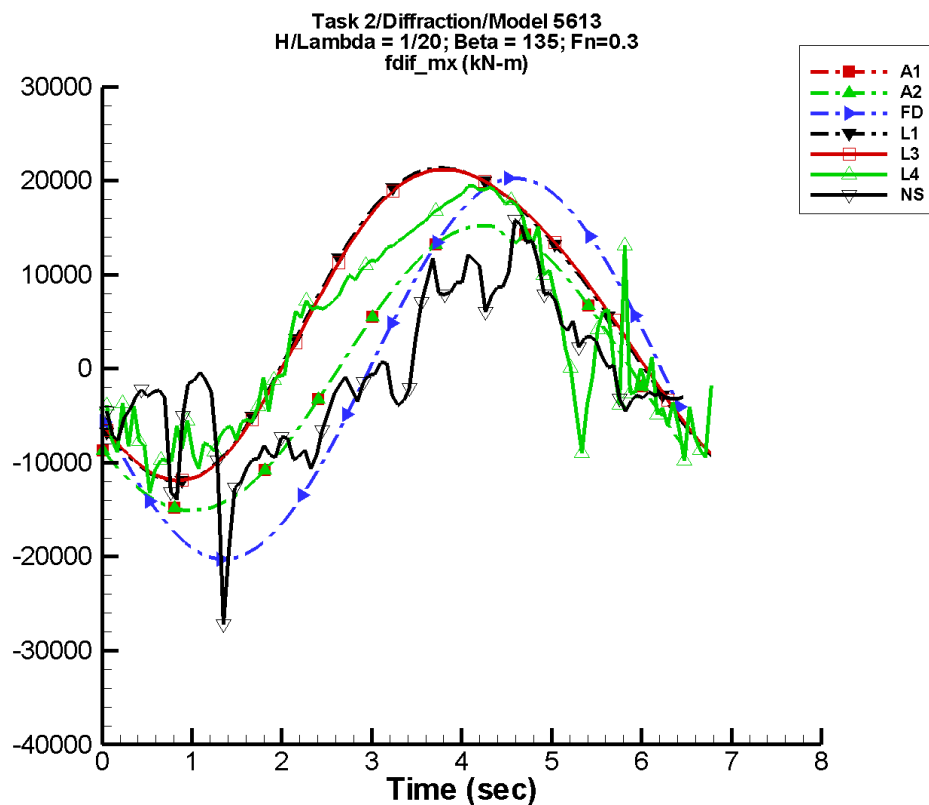
Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.95E+06	1.96E+06	-1.93E+06	1.94E+06
A2	-1.95E+06	1.96E+06	-1.93E+06	1.94E+06
FD	-1.58E+06	1.58E+06	-1.57E+06	1.57E+06
L1	-1.84E+06	1.66E+06	-1.83E+06	1.66E+06
L3	-1.84E+06	1.66E+06	-1.83E+06	1.66E+06
L4	-2.14E+06	6.33E+05	-1.33E+06	5.19E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–941. Time history of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
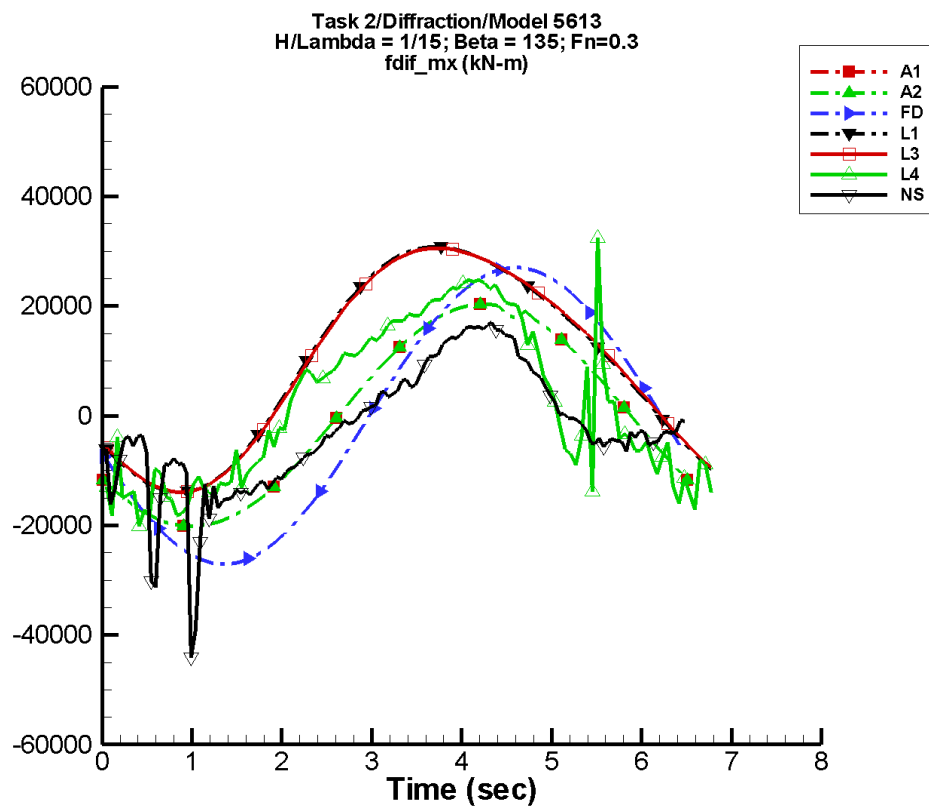
Table G–1881. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	113.	3.43E+05	-71	970.	-143
A2	113.	3.43E+05	-71	970.	-143
FD	-0.660	3.97E+05	-93	12.4	-12
L1	-1.13E+04	2.02E+05	-94	863.	-57
L3	-1.13E+04	2.02E+05	-94	891.	-57
L4	-3.73E+04	1.53E+05	-98	3.29E+04	50
NF	—	—	—	—	—
NS	3.57E+04	4.58E+05	-120	3.34E+03	-167

Table G–1882. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.45E+05	3.44E+05	-3.42E+05	3.42E+05
A2	-3.45E+05	3.44E+05	-3.42E+05	3.42E+05
FD	-3.97E+05	3.97E+05	-3.98E+05	3.97E+05
L1	-2.14E+05	1.90E+05	-2.14E+05	1.90E+05
L3	-2.14E+05	1.90E+05	-2.14E+05	1.90E+05
L4	-1.87E+05	1.72E+05	-1.84E+05	1.68E+05
NF	—	—	—	—
NS	-4.48E+05	4.95E+05	-4.42E+05	4.90E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–942. Time history of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
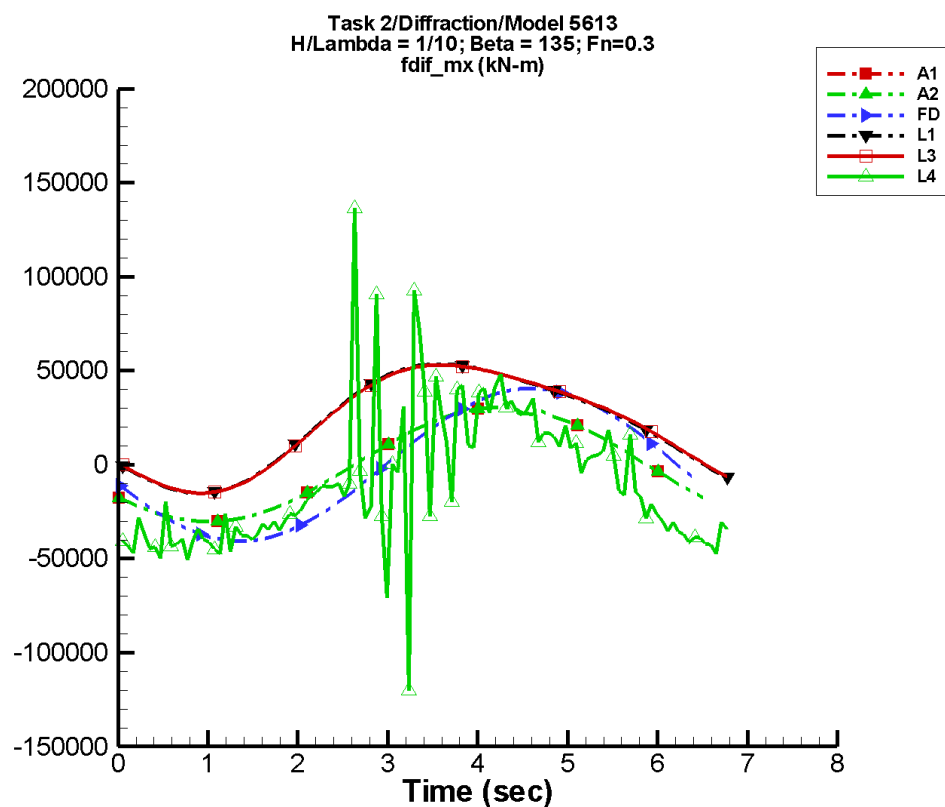
Table G–1883. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	341.	1.03E+06	-71	2.92E+03	-143
A2	341.	1.03E+06	-71	2.92E+03	-143
FD	-2.12	1.19E+06	-93	37.5	-12
L1	-1.72E+04	6.07E+05	-94	6.77E+03	-60
L3	-1.72E+04	6.07E+05	-94	6.85E+03	-59
L4	-6.83E+04	3.55E+05	-110	8.32E+04	11
NF	—	—	—	—	—
NS	-7.02E+04	1.10E+06	-124	1.16E+05	-81

Table G–1884. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.04E+06	1.03E+06	-1.03E+06	1.03E+06
A2	-1.04E+06	1.03E+06	-1.03E+06	1.03E+06
FD	-1.19E+06	1.19E+06	-1.19E+06	1.19E+06
L1	-6.29E+05	5.84E+05	-6.30E+05	5.84E+05
L3	-6.29E+05	5.84E+05	-6.30E+05	5.84E+05
L4	-4.06E+05	4.25E+05	-3.97E+05	4.13E+05
NF	—	—	—	—
NS	-1.32E+06	1.15E+06	-1.30E+06	1.14E+06

Data identically zero, insufficient, or not available from NFA.

Figure G–943. Time history of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
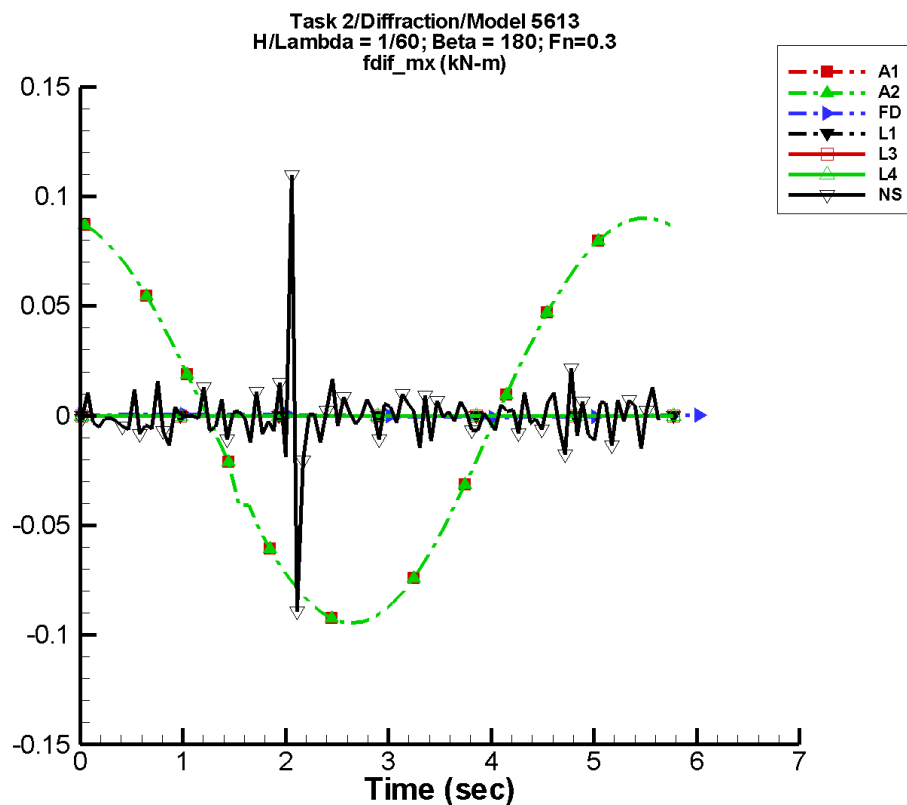
Table G–1885. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	455.	1.38E+06	-71	3.90E+03	-143
A2	455.	1.38E+06	-71	3.90E+03	-143
FD	-2.67	1.59E+06	-93	49.6	-12
L1	-2.24E+04	8.09E+05	-94	1.18E+04	-60
L3	-2.24E+04	8.09E+05	-94	1.19E+04	-60
L4	-5.92E+04	3.94E+05	-116	7.58E+04	-25
NF	—	—	—	—	—
NS	-3.19E+04	1.19E+06	-134	1.24E+05	-121

Table G–1886. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

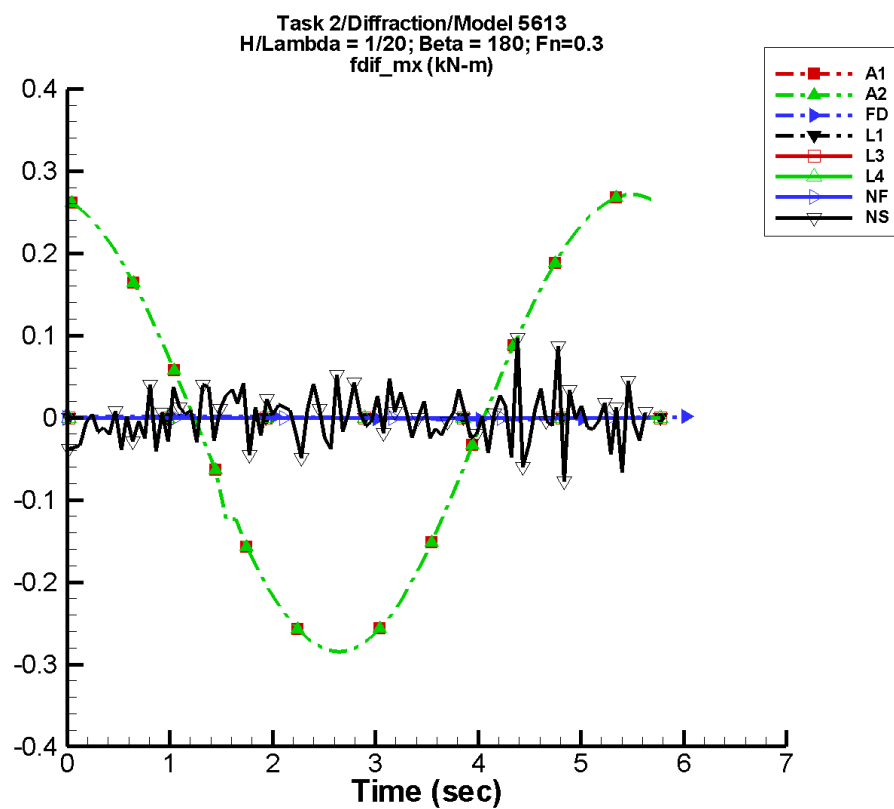| Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.38E+06	1.38E+06	-1.37E+06	1.37E+06
A2	-1.38E+06	1.38E+06	-1.37E+06	1.37E+06
FD	-1.59E+06	1.59E+06	-1.59E+06	1.59E+06
L1	-8.41E+05	7.77E+05	-8.41E+05	7.77E+05
L3	-8.41E+05	7.77E+05	-8.41E+05	7.77E+05
L4	-4.65E+05	4.58E+05	-4.41E+05	4.45E+05
NF	—	—	—	—
NS	-1.39E+06	1.27E+06	-1.38E+06	1.25E+06

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–944. Time history of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
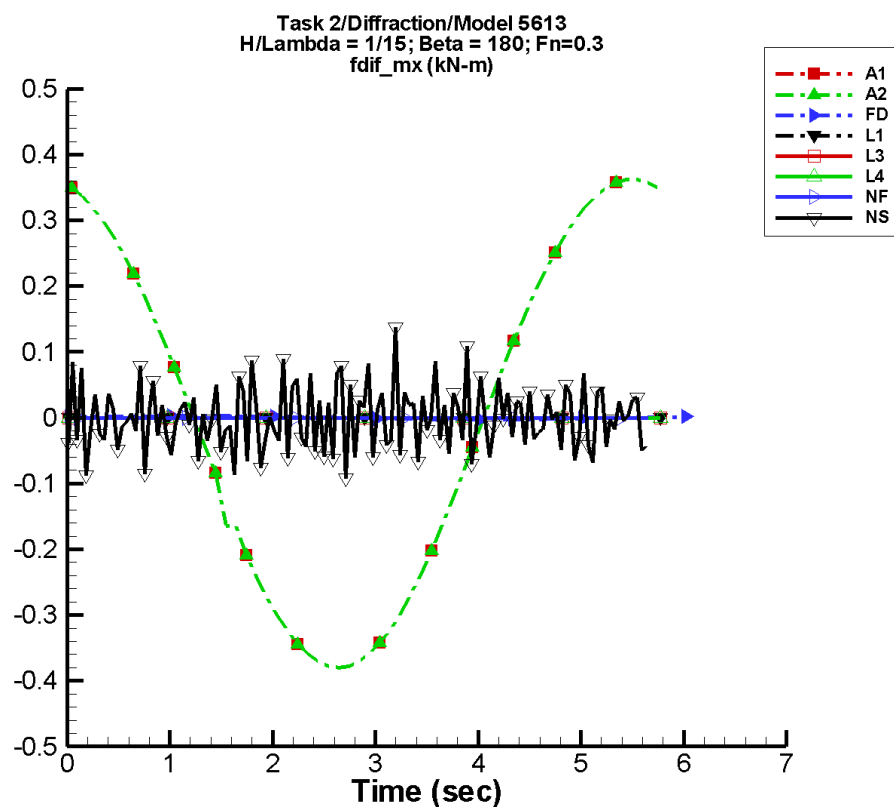
Table G–1887. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	682.	2.07E+06	-71	5.84E+03	-143
A2	682.	2.07E+06	-71	5.84E+03	-143
FD	-4.24	2.38E+06	-93	74.9	-12
L1	-3.74E+04	1.21E+06	-94	2.61E+04	-60
L3	-3.74E+04	1.21E+06	-94	2.63E+04	-60
L4	8.28E+03	4.28E+05	-128	4.52E+03	-78
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1888. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.08E+06	2.07E+06	-2.06E+06	2.06E+06
A2	-2.08E+06	2.07E+06	-2.06E+06	2.06E+06
FD	-2.38E+06	2.38E+06	-2.39E+06	2.38E+06
L1	-1.27E+06	1.16E+06	-1.27E+06	1.16E+06
L3	-1.27E+06	1.16E+06	-1.27E+06	1.16E+06
L4	-1.02E+06	8.18E+05	-4.30E+05	4.83E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–945. Time history of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
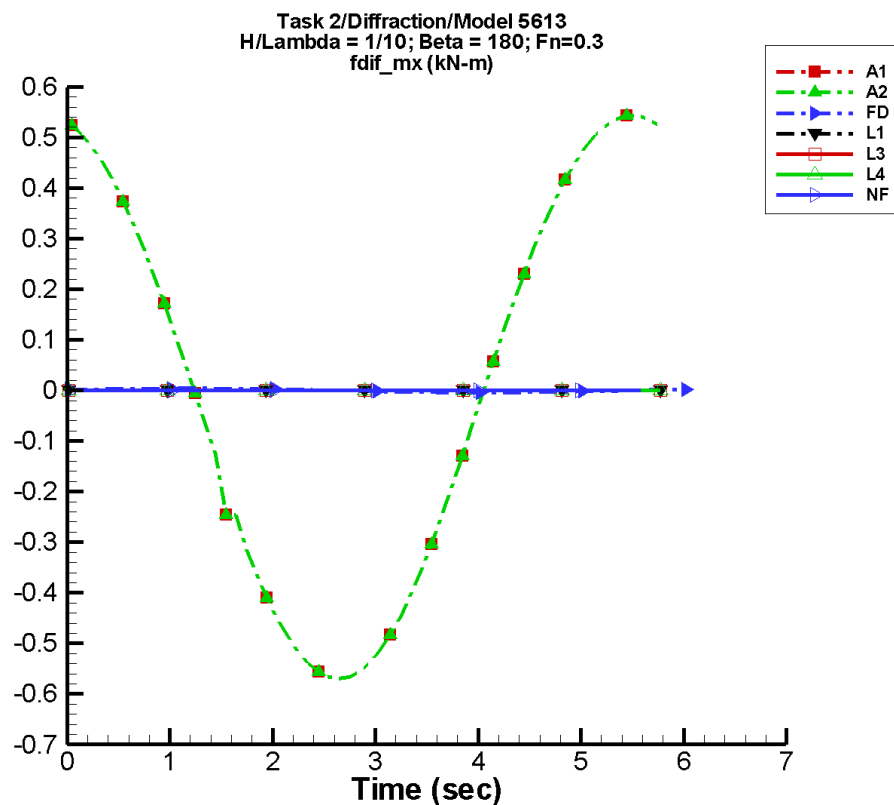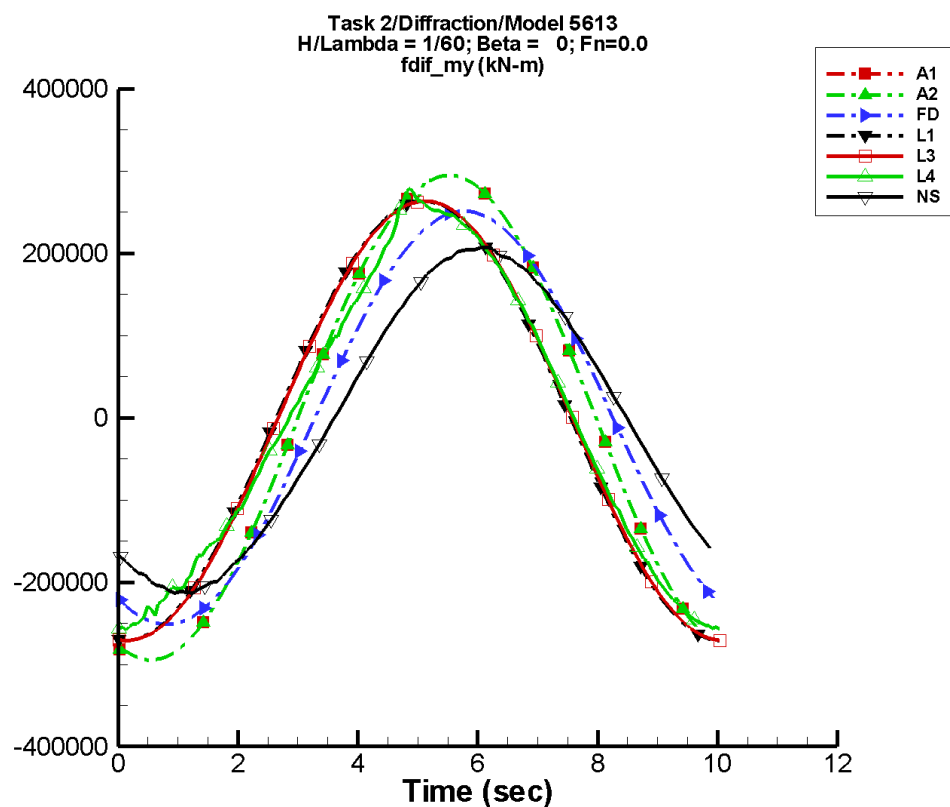
Table G–1889. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.10E+03	3.71E+05	-123	641.	-162
A2	1.10E+03	3.71E+05	-123	641.	-162
FD	-93.7	3.96E+05	-114	152.	-32
L1	-1.26E+04	2.90E+05	-120	3.48E+03	-155
L3	-1.26E+04	2.90E+05	-121	3.49E+03	-155
L4	-4.12E+04	2.53E+05	-121	2.87E+04	-53
NF	—	—	—	—	—
NS	2.31E+04	4.24E+05	-135	4.94E+03	-122

Table G–1890. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.75E+05	3.70E+05	-3.75E+05	3.69E+05
A2	-3.75E+05	3.70E+05	-3.75E+05	3.69E+05
FD	-3.96E+05	3.96E+05	-3.95E+05	3.95E+05
L1	-3.06E+05	2.74E+05	-3.06E+05	2.74E+05
L3	-3.06E+05	2.74E+05	-3.06E+05	2.74E+05
L4	-3.05E+05	2.49E+05	-3.03E+05	2.46E+05
NF	—	—	—	—
NS	-4.20E+05	4.52E+05	-4.14E+05	4.47E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–946. Time history of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
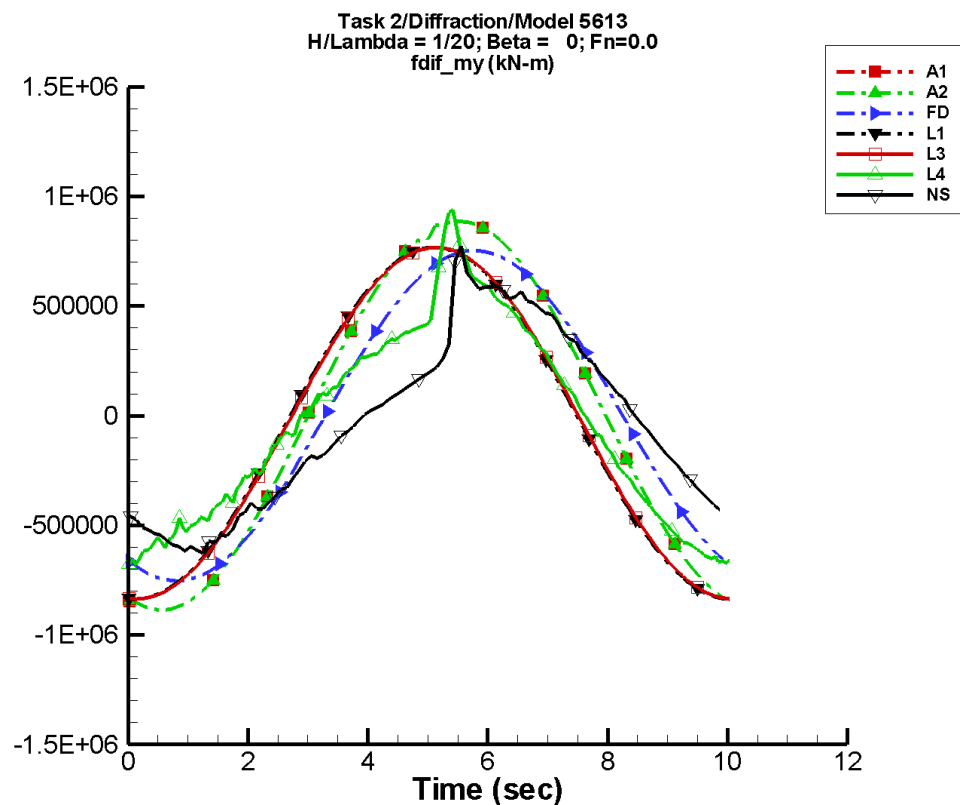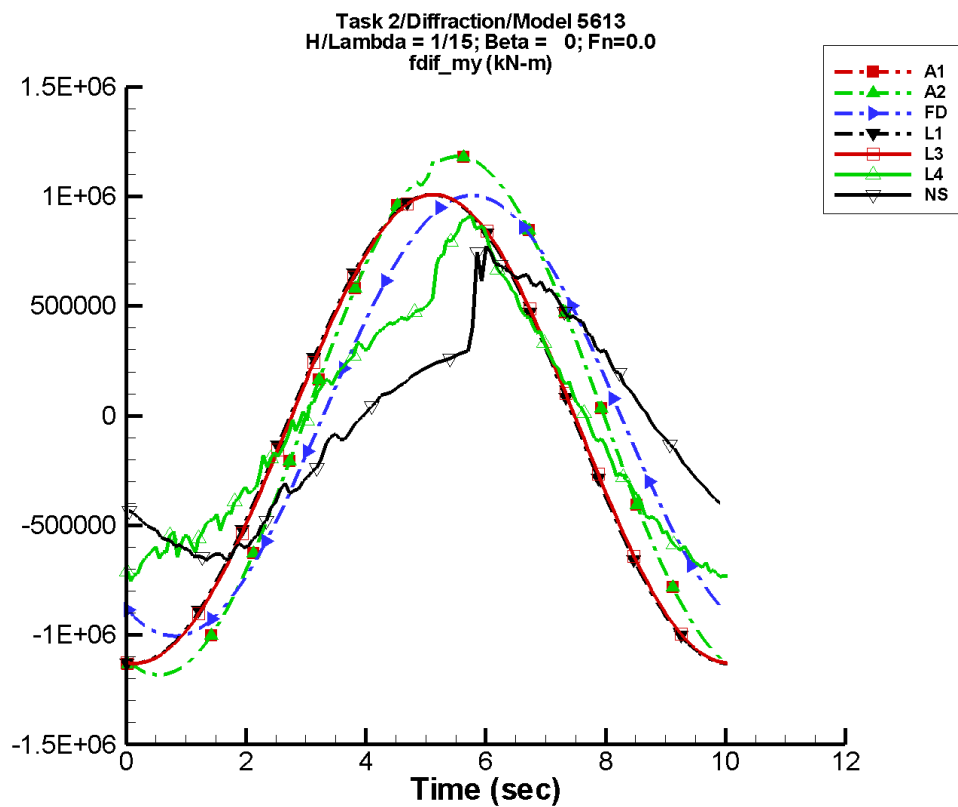
Table G–1891. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	3.32E+03	1.12E+06	-123	1.93E+03	-162
A2	3.32E+03	1.12E+06	-123	1.93E+03	-162
FD	-281.	1.19E+06	-114	458.	-32
L1	-2.73E+04	8.69E+05	-120	3.18E+04	-155
L3	-2.73E+04	8.70E+05	-121	3.18E+04	-155
L4	-9.83E+04	6.14E+05	-128	1.06E+05	-88
NF	—	—	—	—	—
NS	-1.49E+04	1.00E+06	-139	3.50E+04	-179

Table G–1892. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.13E+06	1.11E+06	-1.13E+06	1.11E+06
A2	-1.13E+06	1.11E+06	-1.13E+06	1.11E+06
FD	-1.19E+06	1.19E+06	-1.18E+06	1.18E+06
L1	-9.29E+05	8.10E+05	-9.28E+05	8.10E+05
L3	-9.29E+05	8.11E+05	-9.28E+05	8.10E+05
L4	-7.70E+05	6.15E+05	-7.68E+05	6.09E+05
NF	—	—	—	—
NS	-1.09E+06	1.06E+06	-1.07E+06	9.90E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–947. Time history of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
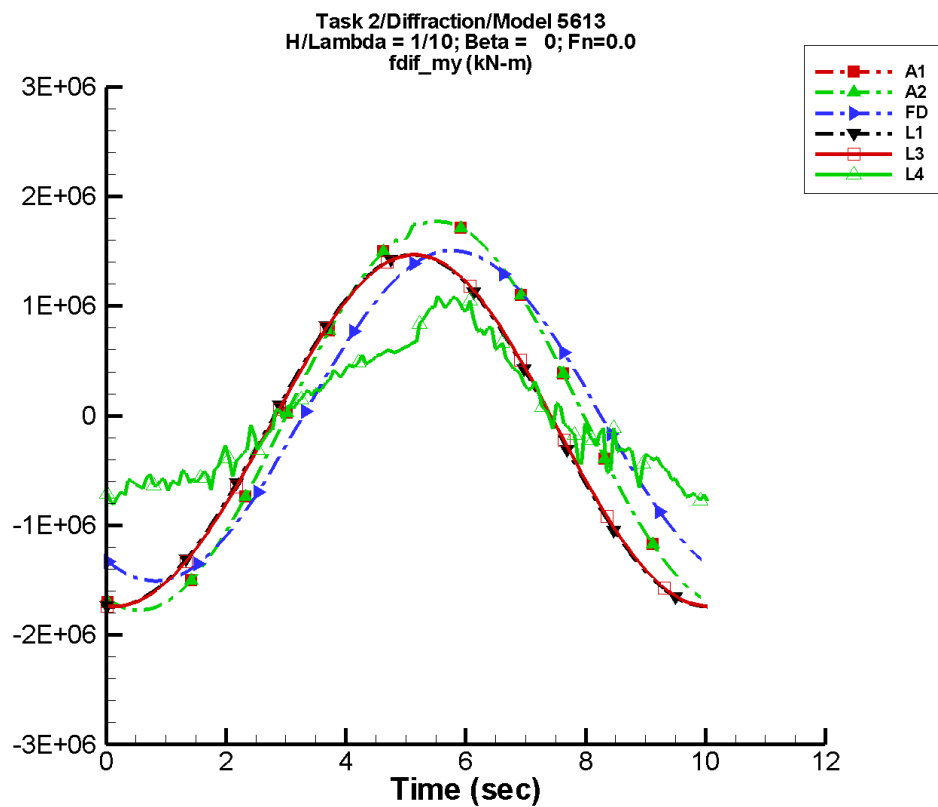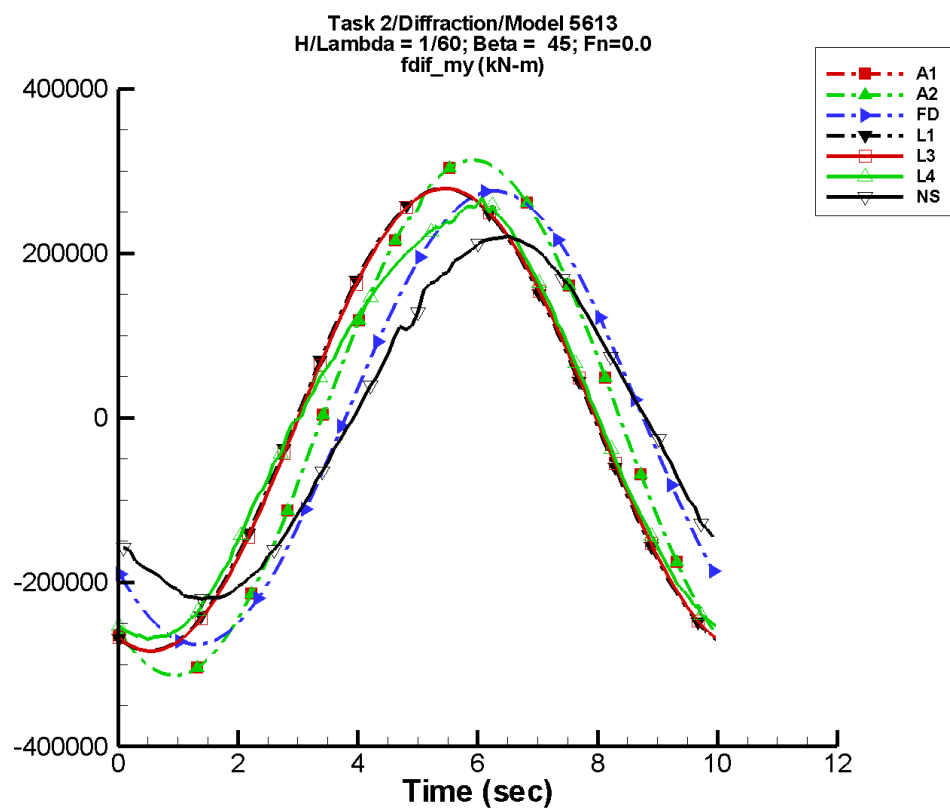
Table G–1893. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	4.43E+03	1.49E+06	-123	2.57E+03	-162
A2	4.43E+03	1.49E+06	-123	2.57E+03	-162
FD	-375.	1.58E+06	-114	610.	-32
L1	-4.02E+04	1.16E+06	-120	5.66E+04	-155
L3	-4.01E+04	1.16E+06	-121	5.66E+04	-155
L4	-1.06E+05	7.22E+05	-132	1.54E+05	-108
NF	—	—	—	—	—
NS	-4.40E+04	1.26E+06	-139	8.46E+04	-167

Table G–1894. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.51E+06	1.49E+06	-1.50E+06	1.48E+06
A2	-1.51E+06	1.49E+06	-1.50E+06	1.48E+06
FD	-1.58E+06	1.58E+06	-1.58E+06	1.58E+06
L1	-1.26E+06	1.06E+06	-1.25E+06	1.06E+06
L3	-1.26E+06	1.06E+06	-1.26E+06	1.06E+06
L4	-9.28E+05	7.53E+05	-9.22E+05	7.45E+05
NF	—	—	—	—
NS	-1.43E+06	1.45E+06	-1.40E+06	1.27E+06

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 45; Fn=0.3
fdif_my (kN-m)

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–948. Time history of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1895. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	6.65E+03	2.23E+06	-123	3.86E+03	-162
A2	6.65E+03	2.23E+06	-123	3.86E+03	-162
FD	-563.	2.37E+06	-114	915.	-32
L1	-7.68E+04	1.74E+06	-120	1.28E+05	-155
L3	-7.67E+04	1.74E+06	-121	1.28E+05	-156
L4	2.01E+04	7.89E+05	-146	2.35E+05	152
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1896. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

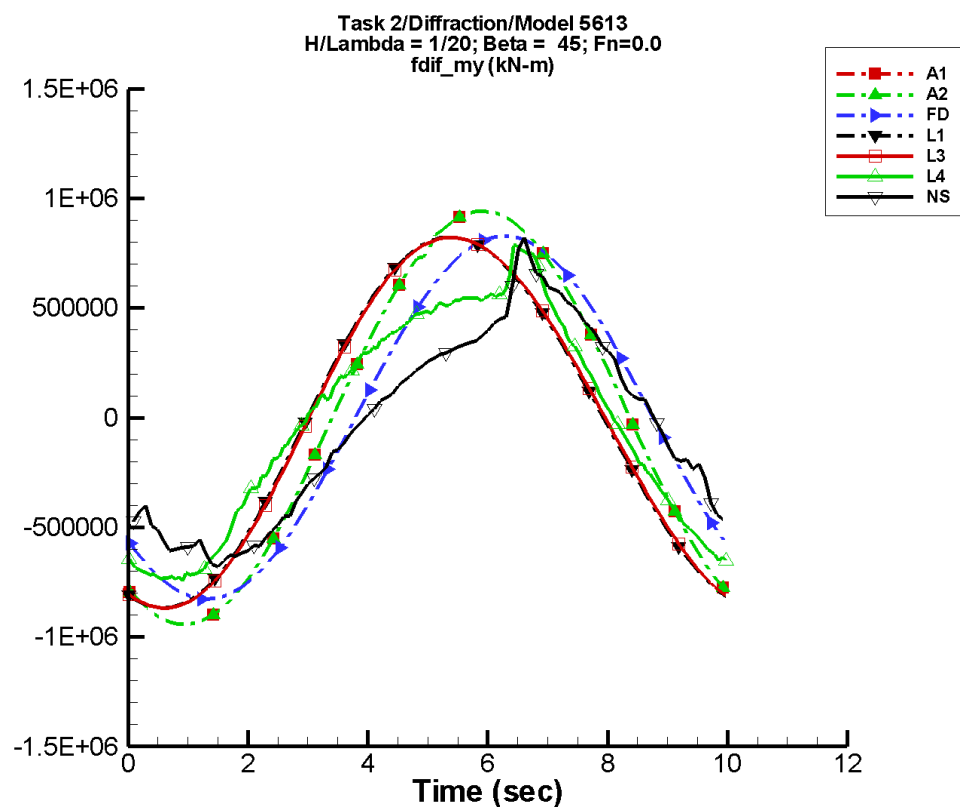| Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.26E+06	2.23E+06	-2.26E+06	2.23E+06
A2	-2.26E+06	2.23E+06	-2.26E+06	2.23E+06
FD	-2.37E+06	2.37E+06	-2.37E+06	2.37E+06
L1	-1.94E+06	1.54E+06	-1.94E+06	1.53E+06
L3	-1.94E+06	1.54E+06	-1.94E+06	1.53E+06
L4	-1.30E+06	3.12E+06	-1.27E+06	7.23E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–949. Time history of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
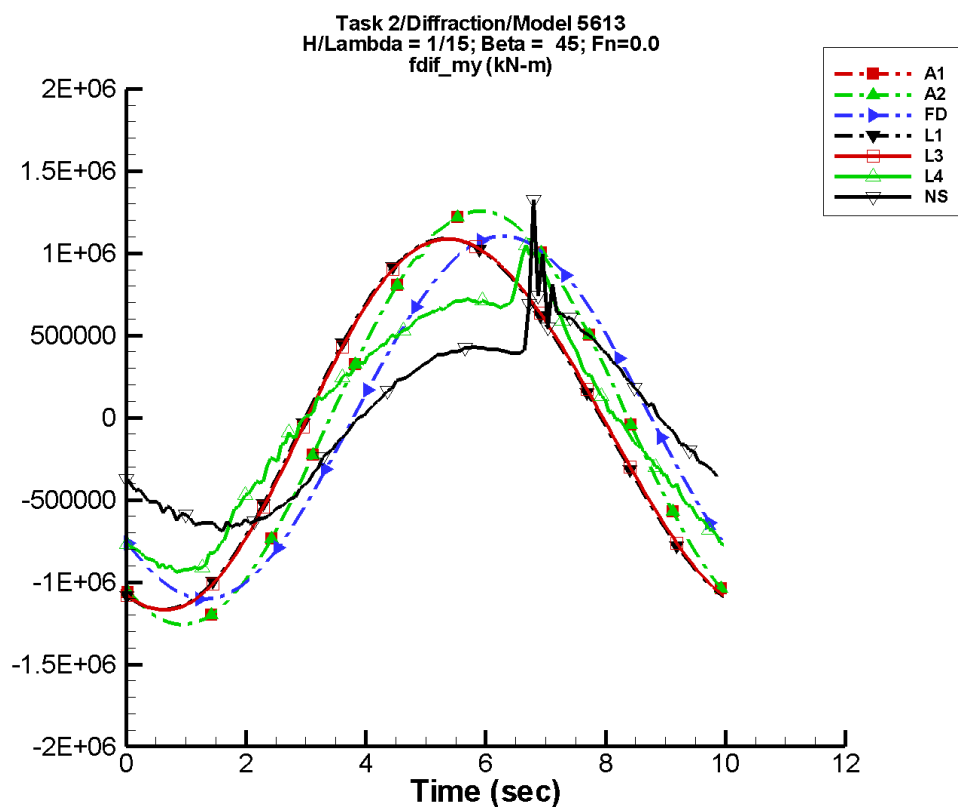
Table G–1897. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	708.	2.18E+05	146	360.	-61
A2	708.	2.18E+05	146	360.	-61
FD	-49.4	1.13E+05	141	52.8	171
L1	-1.47E+04	1.67E+05	159	4.70E+03	61
L3	-1.47E+04	1.67E+05	158	4.69E+03	61
L4	-4.86E+04	1.55E+05	172	2.30E+04	67
NF	—	—	—	—	—
NS	1.86E+03	9.01E+04	161	1.97E+03	-12

Table G–1898. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.22E+05	2.24E+05	-2.20E+05	2.21E+05
A2	-2.22E+05	2.24E+05	-2.20E+05	2.21E+05
FD	-1.13E+05	1.13E+05	-1.12E+05	1.12E+05
L1	-1.87E+05	1.48E+05	-1.86E+05	1.47E+05
L3	-1.87E+05	1.48E+05	-1.86E+05	1.47E+05
L4	-2.10E+05	9.04E+04	-2.10E+05	7.49E+04
NF	—	—	—	—
NS	-9.85E+04	1.09E+05	-8.95E+04	8.77E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.3
fdif_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–950. Time history of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
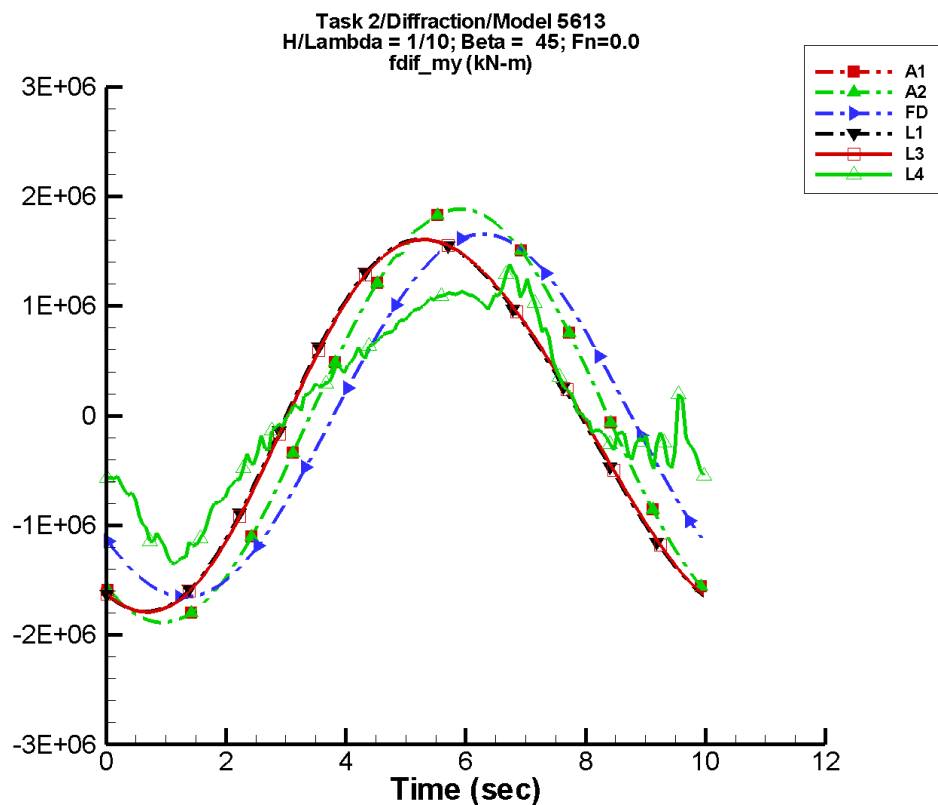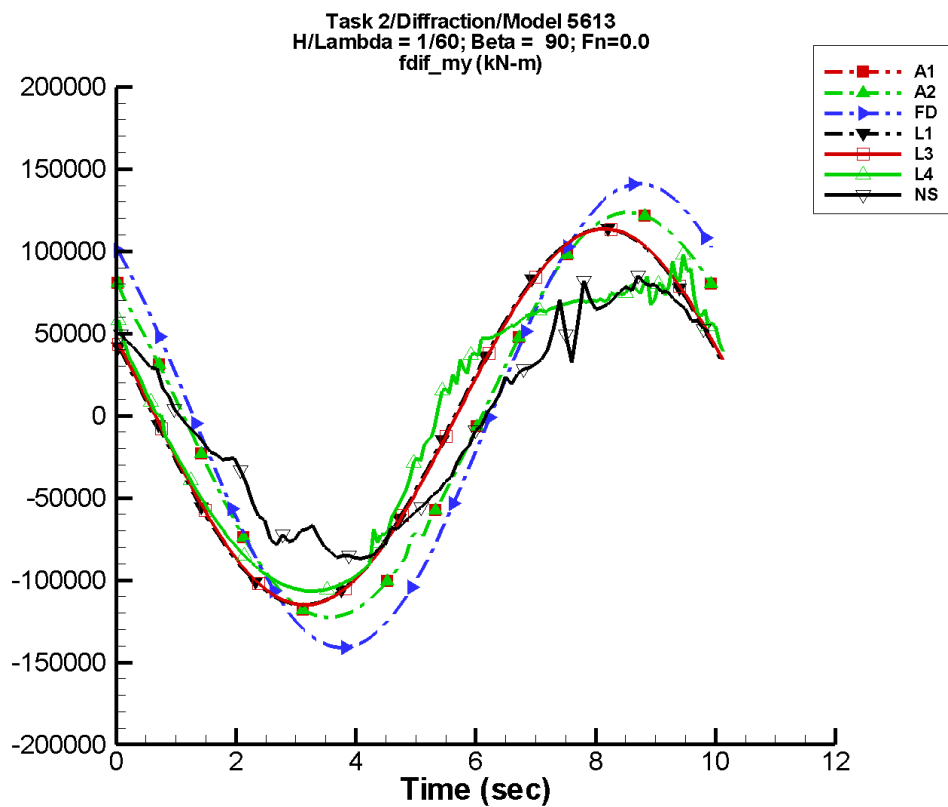
Table G–1899. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.13E+03	6.55E+05	146	1.08E+03	-61
A2	2.13E+03	6.55E+05	146	1.08E+03	-61
FD	-148.	3.39E+05	141	159.	171
L1	-4.73E+04	5.01E+05	159	4.22E+04	60
L3	-4.73E+04	5.02E+05	158	4.22E+04	60
L4	-1.49E+05	3.36E+05	170	7.13E+04	39
NF	—	—	—	—	—
NS	-7.38E+04	2.07E+05	170	4.36E+04	33

Table G–1900. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-6.68E+05	6.73E+05	-6.60E+05	6.65E+05
A2	-6.68E+05	6.73E+05	-6.60E+05	6.65E+05
FD	-3.39E+05	3.39E+05	-3.36E+05	3.36E+05
L1	-5.90E+05	4.13E+05	-5.88E+05	4.12E+05
L3	-5.90E+05	4.14E+05	-5.88E+05	4.12E+05
L4	-5.39E+05	2.30E+05	-5.37E+05	1.44E+05
NF	—	—	—	—
NS	-4.26E+05	2.25E+05	-2.91E+05	1.44E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 90; Fn=0.3
fdif_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–951. Time history of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1901. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	2.84E+03	8.75E+05	146	1.45E+03	-61
A2	2.84E+03	8.75E+05	146	1.45E+03	-61
FD	-197.	4.52E+05	141	211.	171
L1	-7.58E+04	6.69E+05	159	7.49E+04	60
L3	-7.58E+04	6.69E+05	158	7.49E+04	60
L4	-1.90E+05	3.77E+05	164	1.01E+05	35
NF	—	—	—	—	—
NS	-1.68E+04	1.26E+05	-167	3.06E+04	57

Table G–1902. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
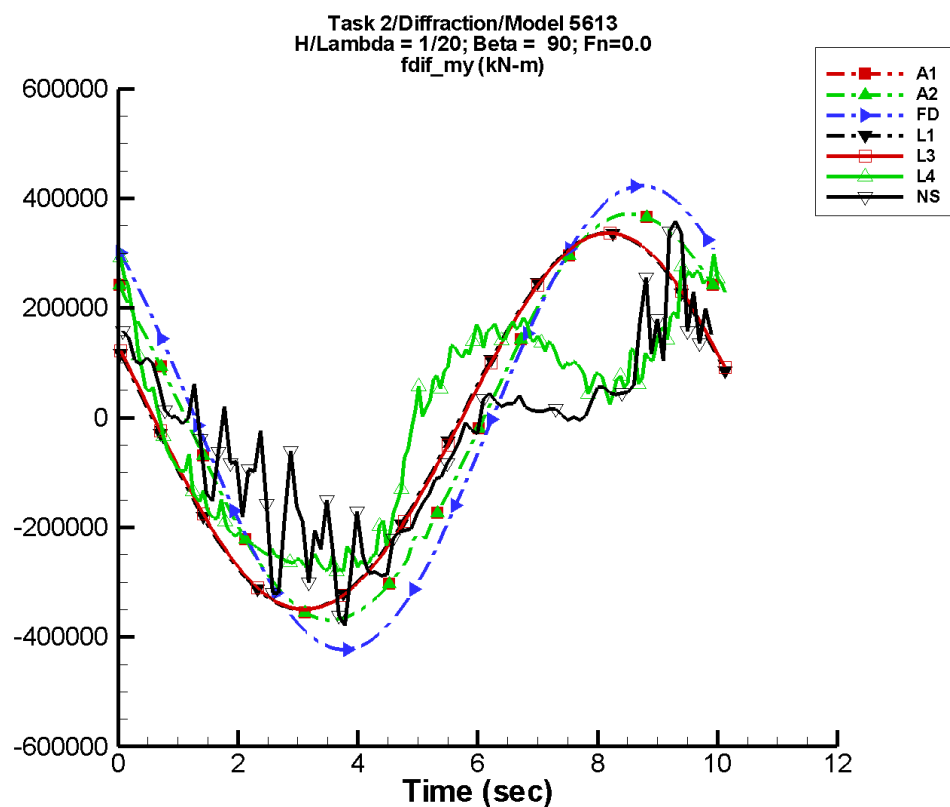
Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-8.92E+05	8.98E+05	-8.81E+05	8.88E+05
A2	-8.92E+05	8.98E+05	-8.81E+05	8.88E+05
FD	-4.53E+05	4.52E+05	-4.48E+05	4.48E+05
L1	-8.19E+05	5.20E+05	-8.15E+05	5.19E+05
L3	-8.18E+05	5.21E+05	-8.15E+05	5.20E+05
L4	-7.88E+05	2.64E+05	-7.48E+05	2.11E+05
NF	—	—	—	—
NS	-2.85E+05	6.04E+05	-1.46E+05	1.92E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–952. Time history of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
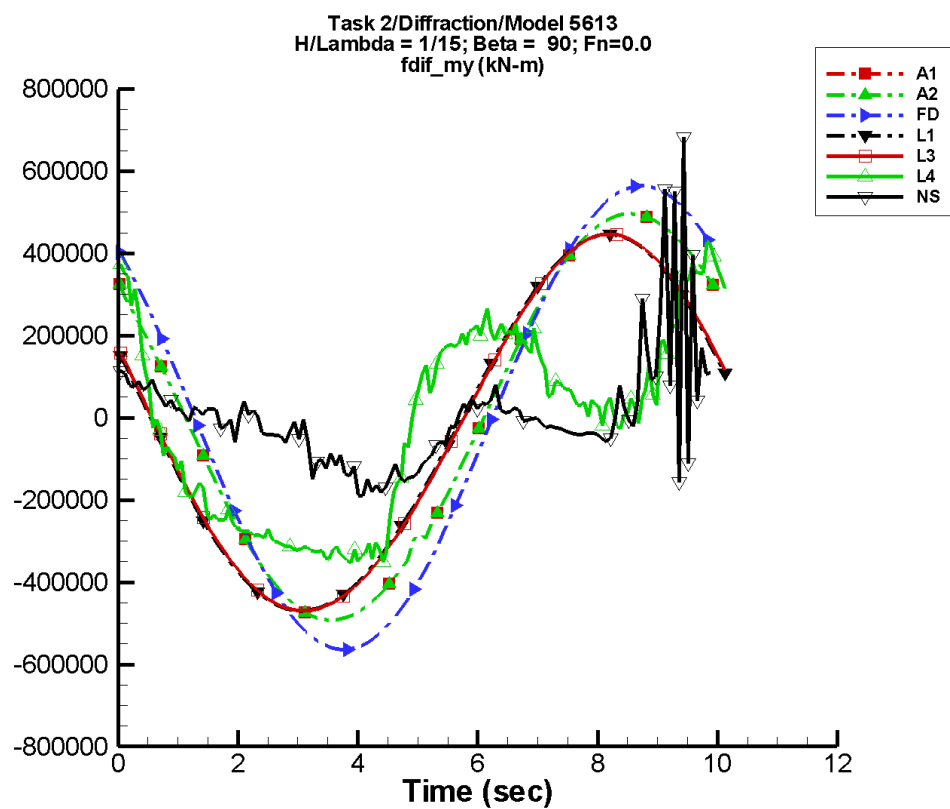
Table G–1903. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	4.27E+03	1.31E+06	146	2.17E+03	-61
A2	4.27E+03	1.31E+06	146	2.17E+03	-61
FD	-296.	6.79E+05	141	317.	171
L1	-1.57E+05	1.00E+06	159	1.69E+05	60
L3	-1.57E+05	1.00E+06	158	1.69E+05	60
L4	-1.24E+05	1.36E+05	122	2.54E+05	-116
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1904. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.34E+06	1.35E+06	-1.32E+06	1.33E+06
A2	-1.34E+06	1.35E+06	-1.32E+06	1.33E+06
FD	-6.79E+05	6.79E+05	-6.72E+05	6.72E+05
L1	-1.33E+06	6.86E+05	-1.32E+06	6.84E+05
L3	-1.33E+06	6.90E+05	-1.32E+06	6.88E+05
L4	-3.62E+06	5.14E+06	-1.16E+06	1.39E+06
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–953. Time history of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
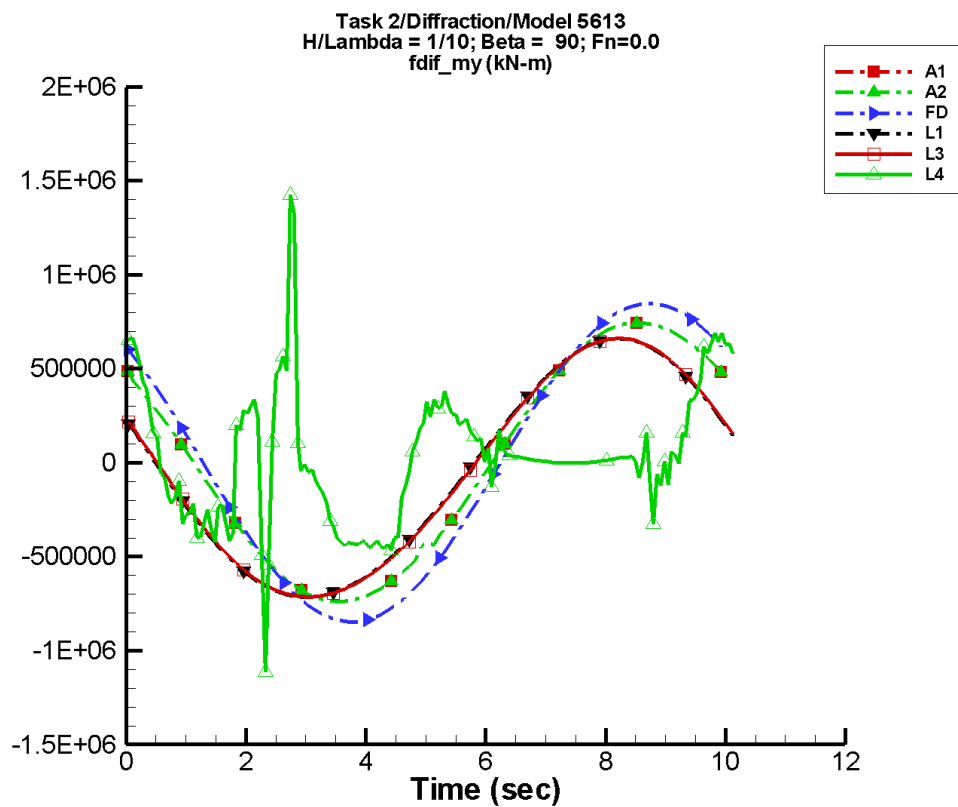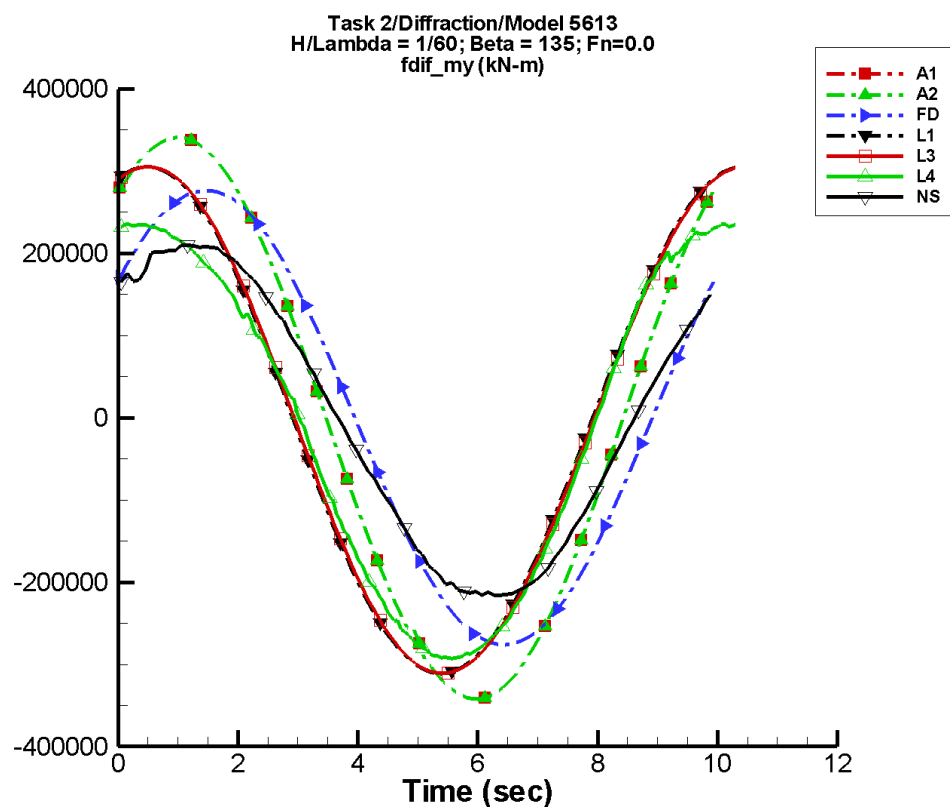
Table G–1905. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-188.	2.89E+05	45	1.27E+03	-139
A2	-188.	2.89E+05	45	1.27E+03	-139
FD	9.91	2.65E+05	26	12.9	-176
L1	-1.39E+04	2.88E+05	61	3.97E+03	-84
L3	-1.39E+04	2.88E+05	60	3.97E+03	-84
L4	-5.84E+04	2.76E+05	59	3.96E+04	-166
NF	—	—	—	—	—
NS	7.32E+03	1.50E+05	41	3.56E+03	18

Table G–1906. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.93E+05	2.89E+05	-2.85E+05	2.82E+05
A2	-2.93E+05	2.89E+05	-2.85E+05	2.82E+05
FD	-2.65E+05	2.65E+05	-2.59E+05	2.65E+05
L1	-3.04E+05	2.73E+05	-3.01E+05	2.70E+05
L3	-3.04E+05	2.73E+05	-3.01E+05	2.71E+05
L4	-3.49E+05	1.69E+05	-3.46E+05	1.67E+05
NF	—	—	—	—
NS	-1.40E+05	1.63E+05	-1.36E+05	1.61E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–954. Time history of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1907. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
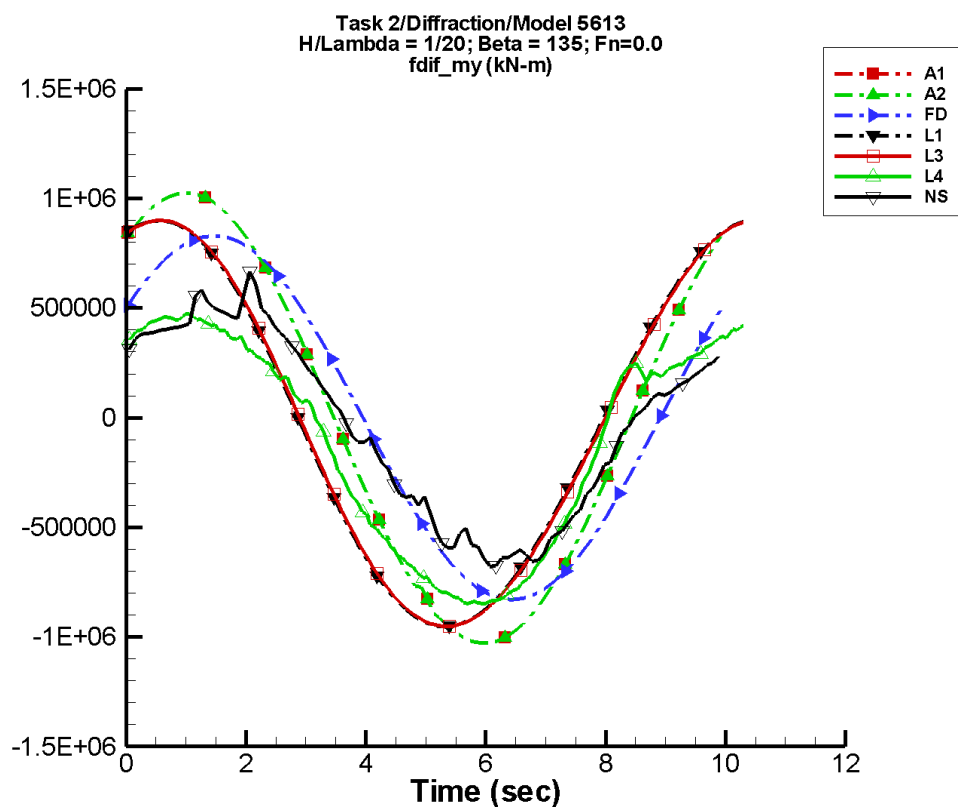
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-565.	8.68E+05	45	3.81E+03	-139
A2	-565.	8.68E+05	45	3.81E+03	-139
FD	29.8	7.95E+05	26	38.8	-176
L1	-3.96E+04	8.64E+05	61	3.55E+04	-84
L3	-3.96E+04	8.65E+05	60	3.55E+04	-84
L4	-2.07E+05	6.92E+05	54	1.22E+05	-170
NF	—	—	—	—	—
NS	-4.94E+04	3.83E+05	41	2.00E+04	-118

Table G–1908. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-8.80E+05	8.68E+05	-8.56E+05	8.49E+05
A2	-8.80E+05	8.68E+05	-8.56E+05	8.49E+05
FD	-7.95E+05	7.94E+05	-7.76E+05	7.95E+05
L1	-9.22E+05	8.11E+05	-9.14E+05	8.04E+05
L3	-9.21E+05	8.14E+05	-9.13E+05	8.08E+05
L4	-9.83E+05	3.88E+05	-9.77E+05	3.69E+05
NF	—	—	—	—
NS	-5.08E+05	6.76E+05	-4.47E+05	3.93E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–955. Time history of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
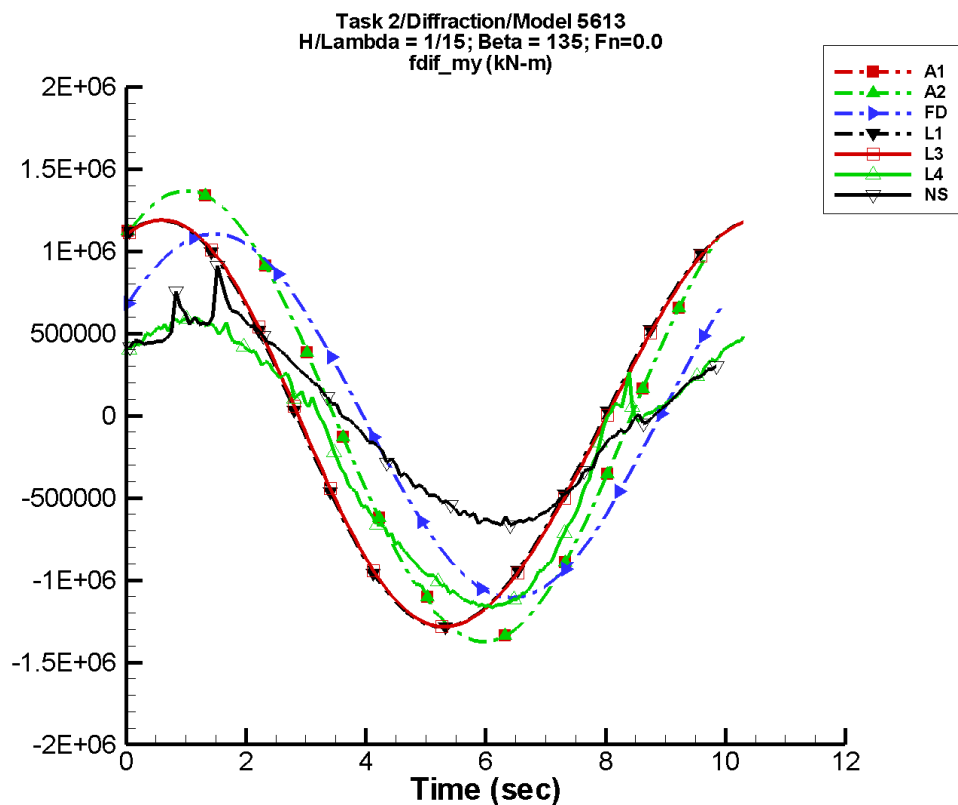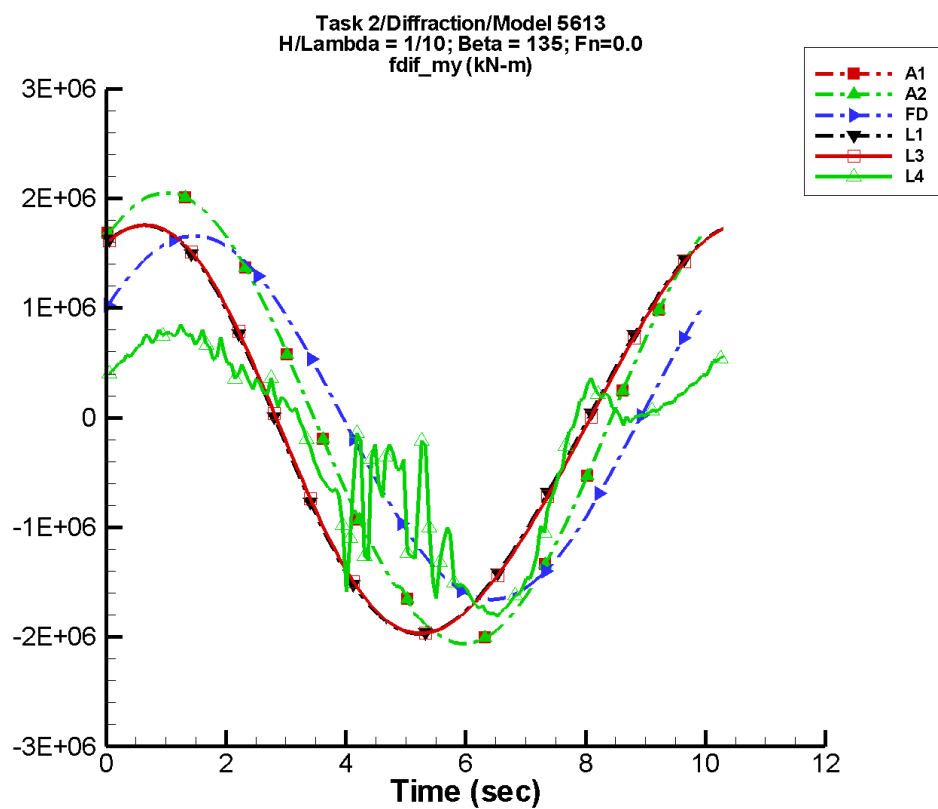
Table G–1909. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-754.	1.16E+06	45	5.08E+03	-139
A2	-754.	1.16E+06	45	5.08E+03	-139
FD	39.7	1.06E+06	26	51.9	-176
L1	-6.20E+04	1.15E+06	61	6.30E+04	-84
L3	-6.20E+04	1.15E+06	60	6.30E+04	-84
L4	-2.71E+05	8.93E+05	51	1.53E+05	-168
NF	—	—	—	—	—
NS	4.04E+04	4.28E+05	41	6.68E+04	-18

Table G–1910. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

	Unfiltered		Filtered	
Code	Minimum (kN-m)	Maximum (kN-m)	Minimum (kN-m)	Maximum (kN-m)
A1	-1.17E+06	1.16E+06	-1.14E+06	1.13E+06
A2	-1.17E+06	1.16E+06	-1.14E+06	1.13E+06
FD	-1.06E+06	1.06E+06	-1.03E+06	1.06E+06
L1	-1.25E+06	1.07E+06	-1.24E+06	1.06E+06
L3	-1.25E+06	1.07E+06	-1.23E+06	1.06E+06
L4	-1.31E+06	5.56E+05	-1.29E+06	4.82E+05
NF	—	—	—	—
NS	-3.76E+05	1.04E+06	-3.58E+05	6.50E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–956. Time history of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
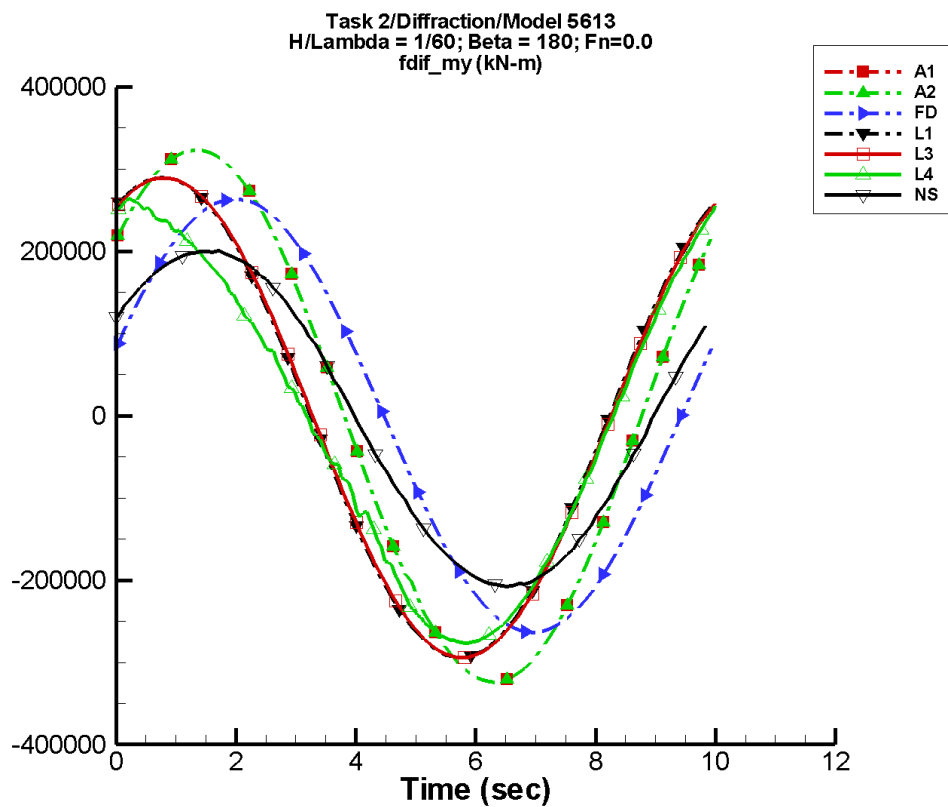
Table G–1911. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-1.13E+03	1.74E+06	45	7.62E+03	-139
A2	-1.13E+03	1.74E+06	45	7.62E+03	-139
FD	59.5	1.59E+06	26	77.6	-176
L1	-1.26E+05	1.73E+06	61	1.42E+05	-84
L3	-1.26E+05	1.73E+06	60	1.42E+05	-84
L4	-2.88E+05	1.09E+06	52	8.18E+04	-167
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1912. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.76E+06	1.74E+06	-1.71E+06	1.70E+06
A2	-1.76E+06	1.74E+06	-1.71E+06	1.70E+06
FD	-1.59E+06	1.59E+06	-1.55E+06	1.59E+06
L1	-1.93E+06	1.56E+06	-1.92E+06	1.55E+06
L3	-1.93E+06	1.57E+06	-1.91E+06	1.56E+06
L4	-2.42E+06	7.94E+05	-1.76E+06	6.80E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–957. Time history of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
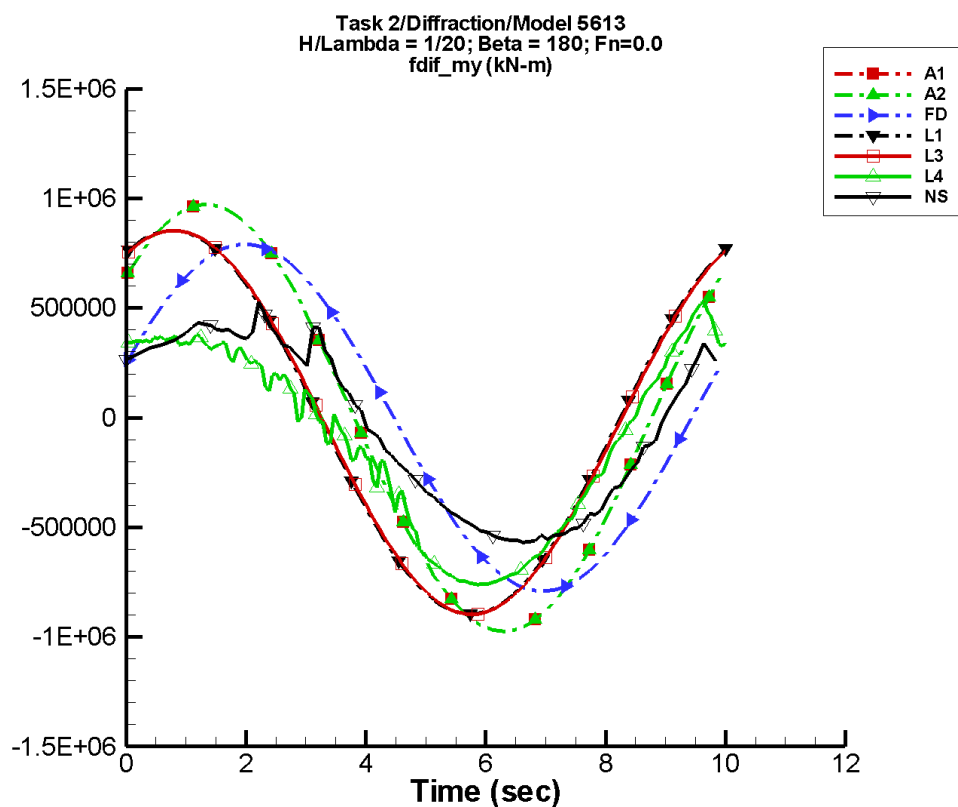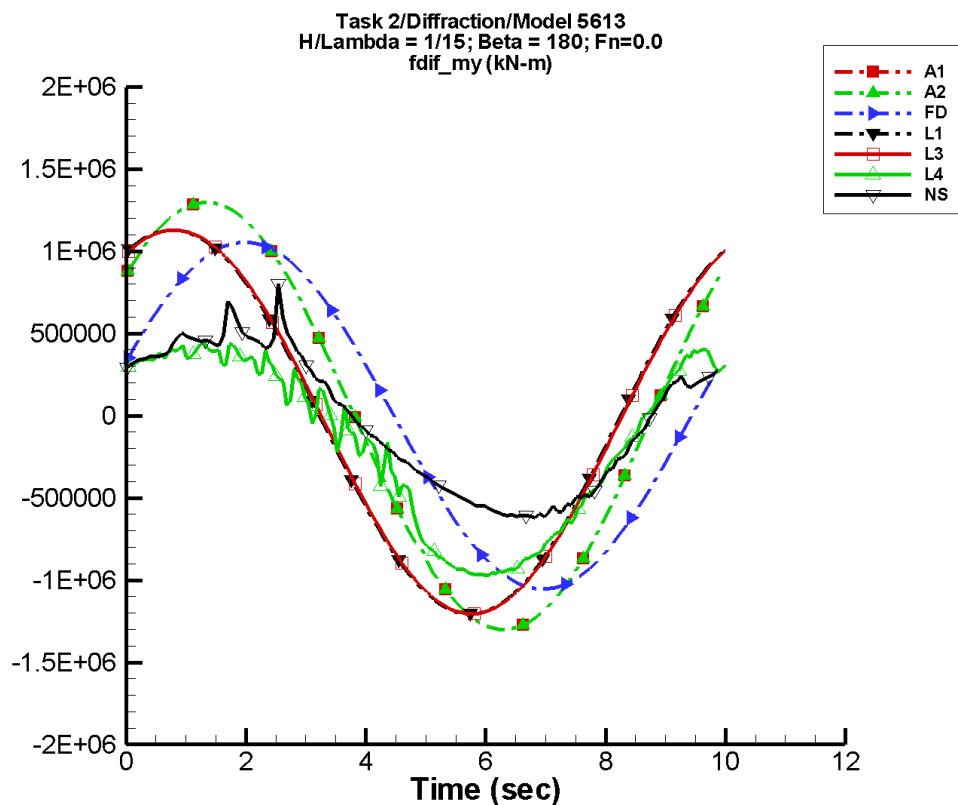
Table G–1913. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-2.02E+03	2.36E+05	20	1.21E+03	-60
A2	-2.02E+03	2.36E+05	20	1.21E+03	-60
FD	-120.	2.38E+05	-26	395.	-81
L1	-1.25E+04	2.96E+05	33	698.	97
L3	-1.25E+04	2.97E+05	31	689.	96
L4	-6.22E+04	2.86E+05	24	5.05E+04	88
NF	—	—	—	—	—
NS	2.49E+03	1.40E+05	34	3.50E+03	-152

Table G–1914. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.37E+05	2.42E+05	-2.30E+05	2.29E+05
A2	-2.37E+05	2.42E+05	-2.30E+05	2.29E+05
FD	-2.38E+05	2.38E+05	-2.30E+05	2.30E+05
L1	-3.09E+05	2.83E+05	-3.06E+05	2.80E+05
L3	-3.09E+05	2.84E+05	-3.06E+05	2.80E+05
L4	-3.84E+05	2.46E+05	-3.64E+05	2.27E+05
NF	—	—	—	—
NS	-1.39E+05	1.43E+05	-1.36E+05	1.39E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–958. Time history of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
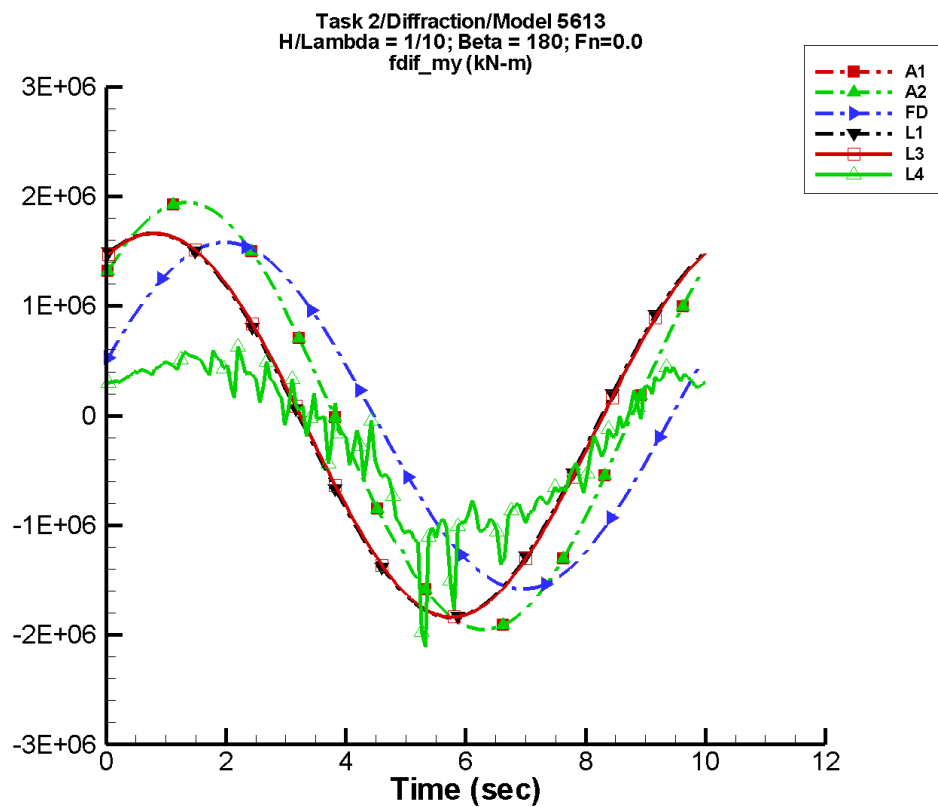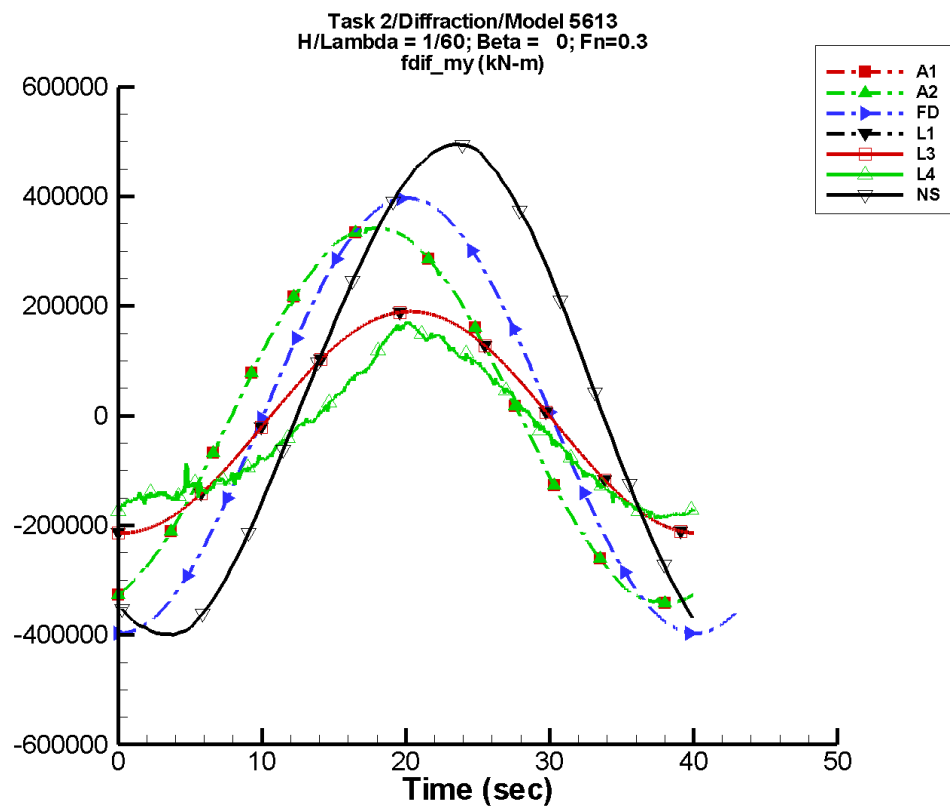
Table G–1915. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-6.06E+03	7.10E+05	20	3.65E+03	-60
A2	-6.06E+03	7.10E+05	20	3.65E+03	-60
FD	-359.	7.14E+05	-26	1.19E+03	-81
L1	-2.54E+04	8.89E+05	33	6.02E+03	132
L3	-2.54E+04	8.90E+05	31	5.97E+03	132
L4	-2.19E+05	6.74E+05	19	1.41E+05	103
NF	—	—	—	—	—
NS	-4.51E+04	3.61E+05	38	3.98E+04	176

Table G–1916. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-7.12E+05	7.27E+05	-6.91E+05	6.89E+05
A2	-7.12E+05	7.27E+05	-6.91E+05	6.89E+05
FD	-7.13E+05	7.13E+05	-6.91E+05	6.91E+05
L1	-9.20E+05	8.58E+05	-9.10E+05	8.49E+05
L3	-9.21E+05	8.58E+05	-9.11E+05	8.49E+05
L4	-9.84E+05	5.43E+05	-9.64E+05	3.75E+05
NF	—	—	—	—
NS	-4.18E+05	5.38E+05	-4.09E+05	3.83E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 180; Fn=0.3
fdif_my (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–959. Time history of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1917. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-8.09E+03	9.48E+05	20	4.87E+03	-60
A2	-8.09E+03	9.48E+05	20	4.87E+03	-60
FD	-479.	9.51E+05	-26	1.58E+03	-81
L1	-3.65E+04	1.19E+06	33	1.09E+04	136
L3	-3.64E+04	1.19E+06	31	1.09E+04	136
L4	-2.80E+05	8.56E+05	17	1.84E+05	105
NF	—	—	—	—	—
NS	3.22E+04	4.09E+05	45	4.04E+04	-108

Table G–1918. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
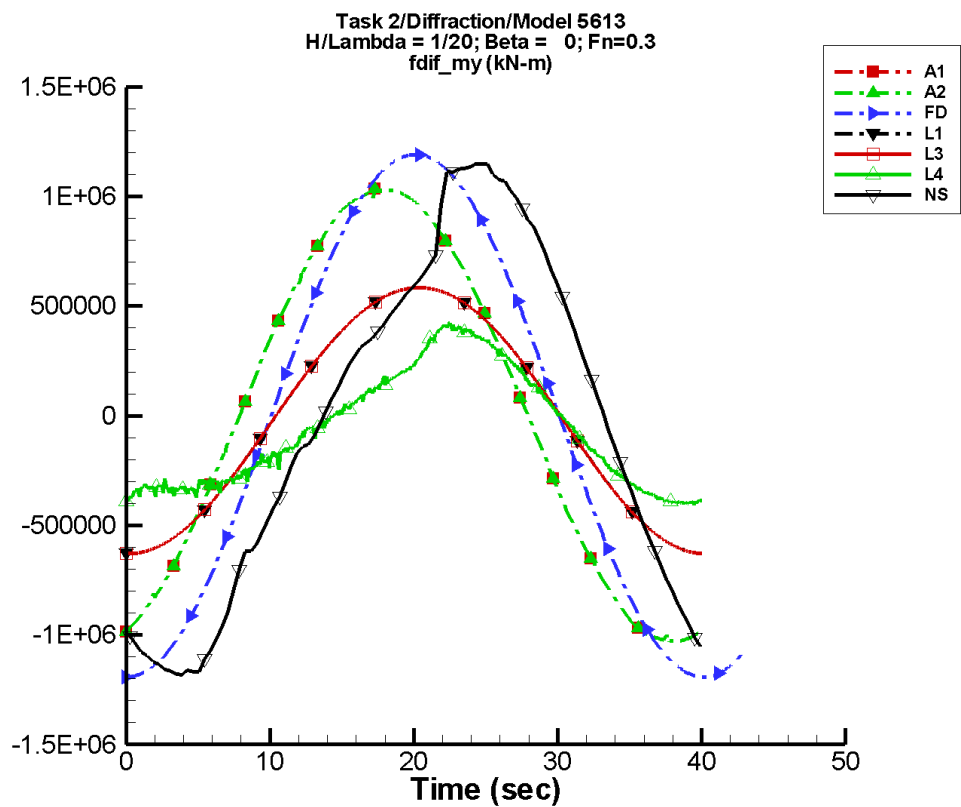
Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-9.51E+05	9.70E+05	-9.22E+05	9.20E+05
A2	-9.51E+05	9.70E+05	-9.22E+05	9.20E+05
FD	-9.51E+05	9.50E+05	-9.21E+05	9.22E+05
L1	-1.23E+06	1.14E+06	-1.22E+06	1.13E+06
L3	-1.23E+06	1.14E+06	-1.22E+06	1.13E+06
L4	-1.25E+06	4.98E+05	-1.23E+06	4.00E+05
NF	—	—	—	—
NS	-3.73E+05	1.17E+06	-3.58E+05	5.00E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–960. Time history of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
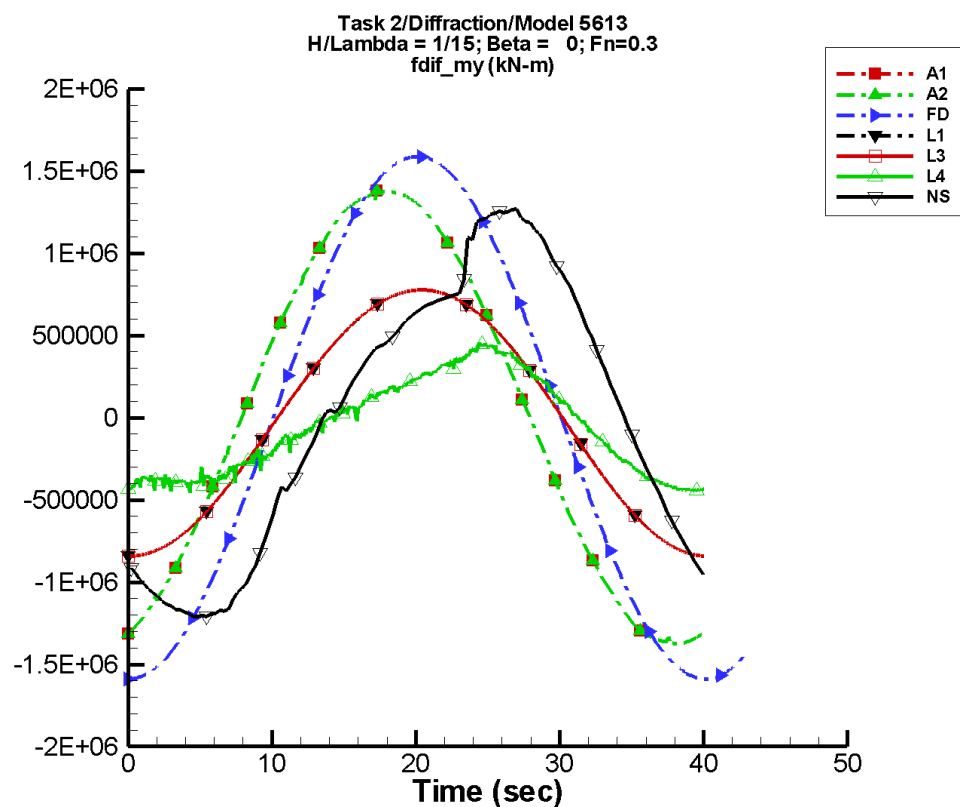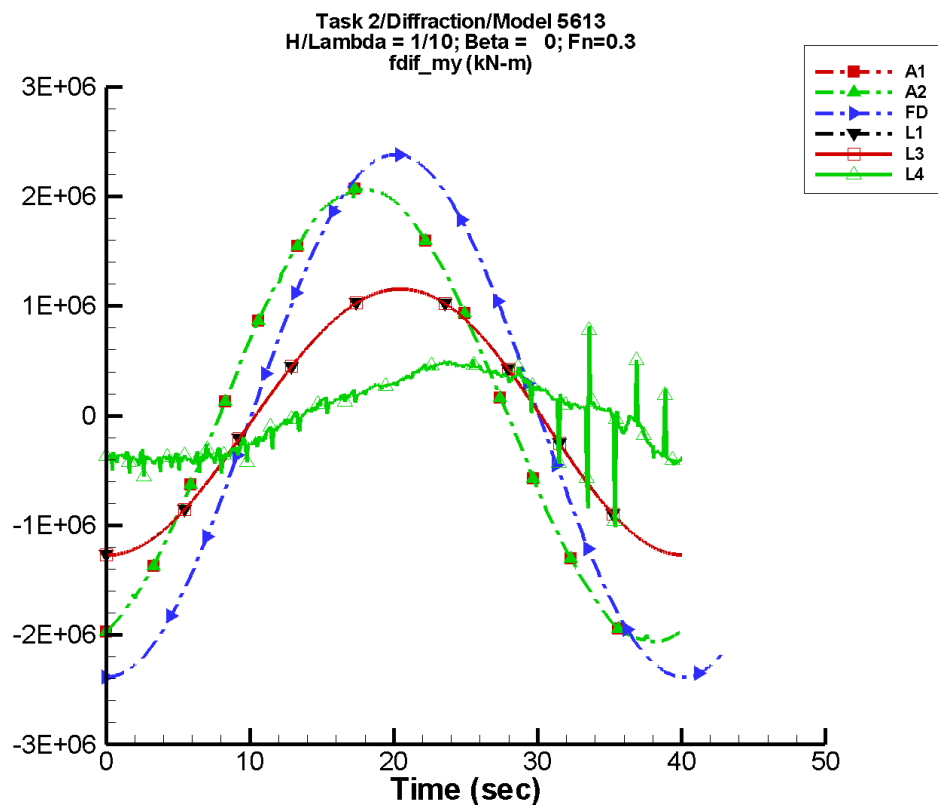
Table G–1919. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-1.21E+04	1.42E+06	20	7.30E+03	-60
A2	-1.21E+04	1.42E+06	20	7.30E+03	-60
FD	-719.	1.43E+06	-26	2.37E+03	-81
L1	-6.80E+04	1.78E+06	33	2.52E+04	140
L3	-6.79E+04	1.78E+06	31	2.51E+04	141
L4	-3.64E+05	1.10E+06	25	1.75E+05	147
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1920. Minimum and maximum of of M_y^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.43E+06	1.46E+06	-1.38E+06	1.38E+06
A2	-1.43E+06	1.46E+06	-1.38E+06	1.38E+06
FD	-1.43E+06	1.43E+06	-1.38E+06	1.38E+06
L1	-1.87E+06	1.68E+06	-1.85E+06	1.67E+06
L3	-1.87E+06	1.69E+06	-1.85E+06	1.67E+06
L4	-2.54E+06	7.21E+05	-1.78E+06	5.59E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–961. Time history of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
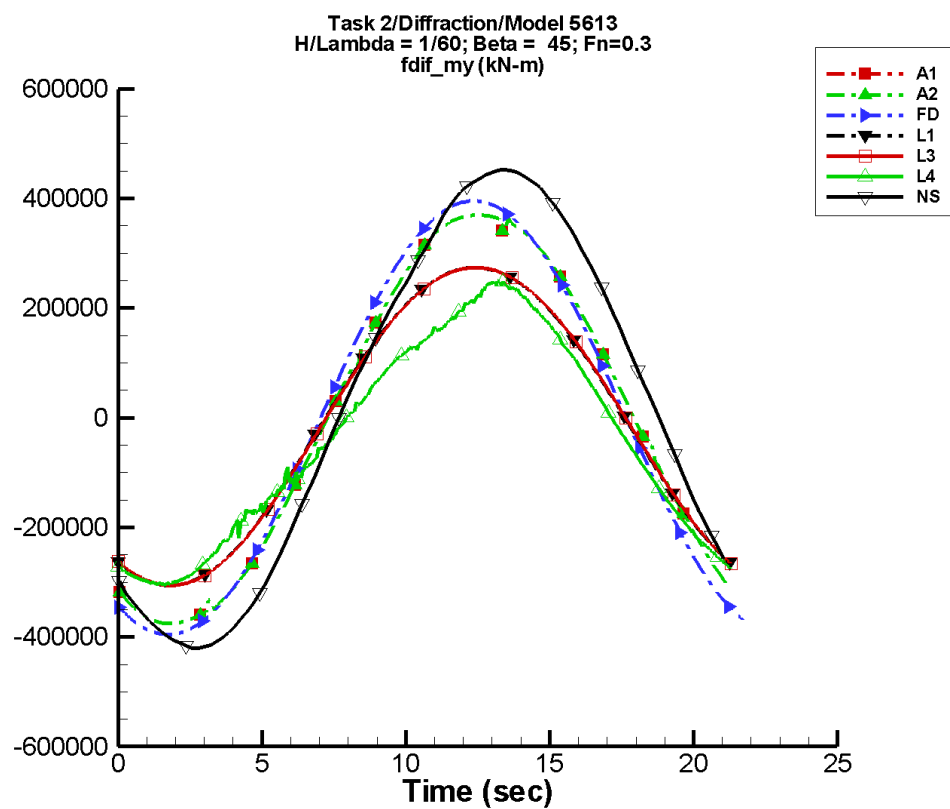
Table G–1921. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.81E-02	4.55	171	2.18E-02	31
A2	1.81E-02	4.55	171	2.18E-02	31
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	1.95E-03	8.08E-03	2	9.57E-03	80

Table G–1922. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.78	4.74	-4.72	4.68
A2	-4.78	4.74	-4.72	4.68
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.123	9.02E-02	-3.38E-02	4.07E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 0; Fn=0.0
fdif_mz (kN-m)

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–962. Time history of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1923. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	5.46E-02	13.7	171	6.55E-02	31
A2	5.46E-02	13.7	171	6.55E-02	31
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	1.31E-02	4.62E-02	58	7.25E-02	55

Table G–1924. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

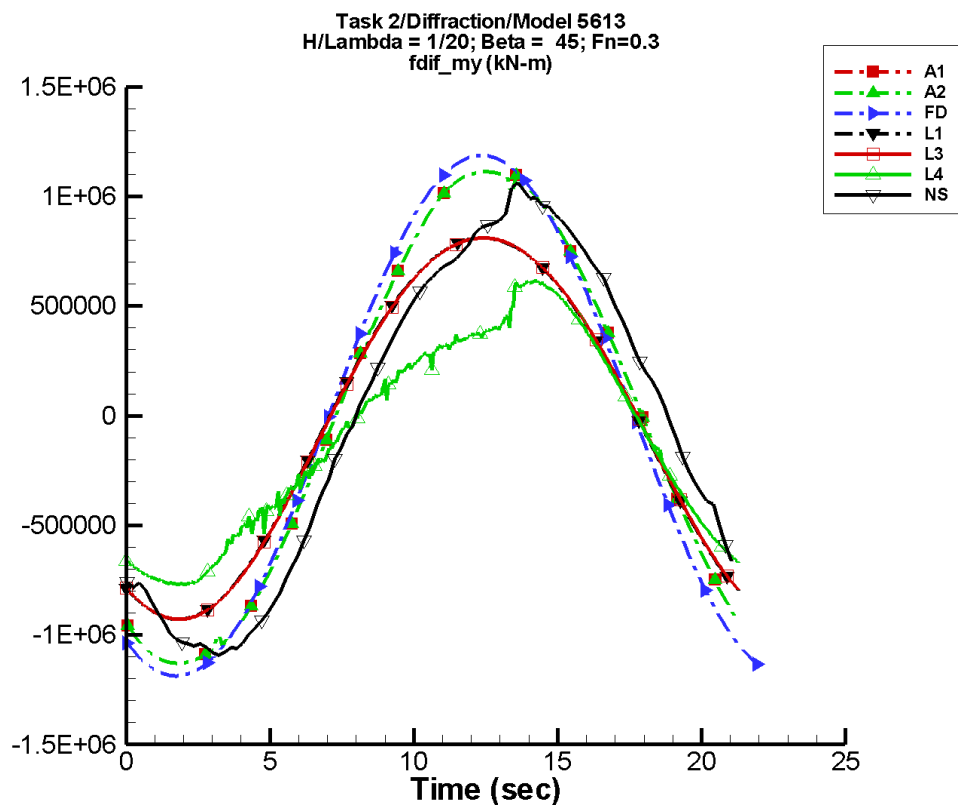| Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-14.4	14.3	-14.2	14.1
A2	-14.4	14.3	-14.2	14.1
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.229	0.550	-0.133	0.517

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–963. Time history of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
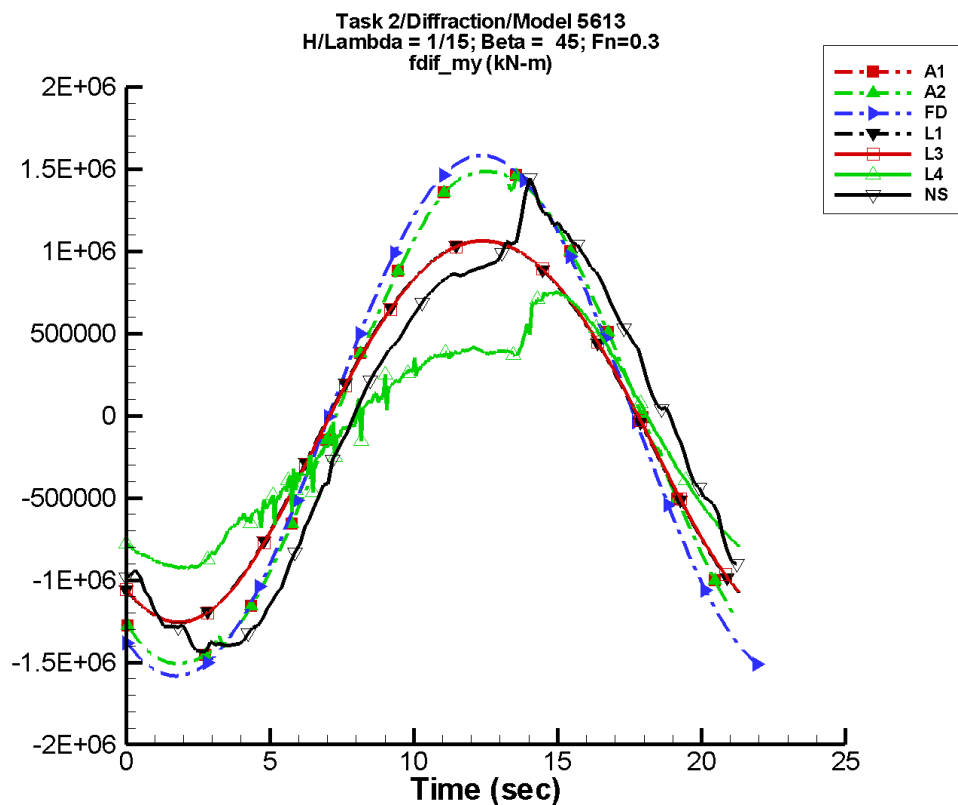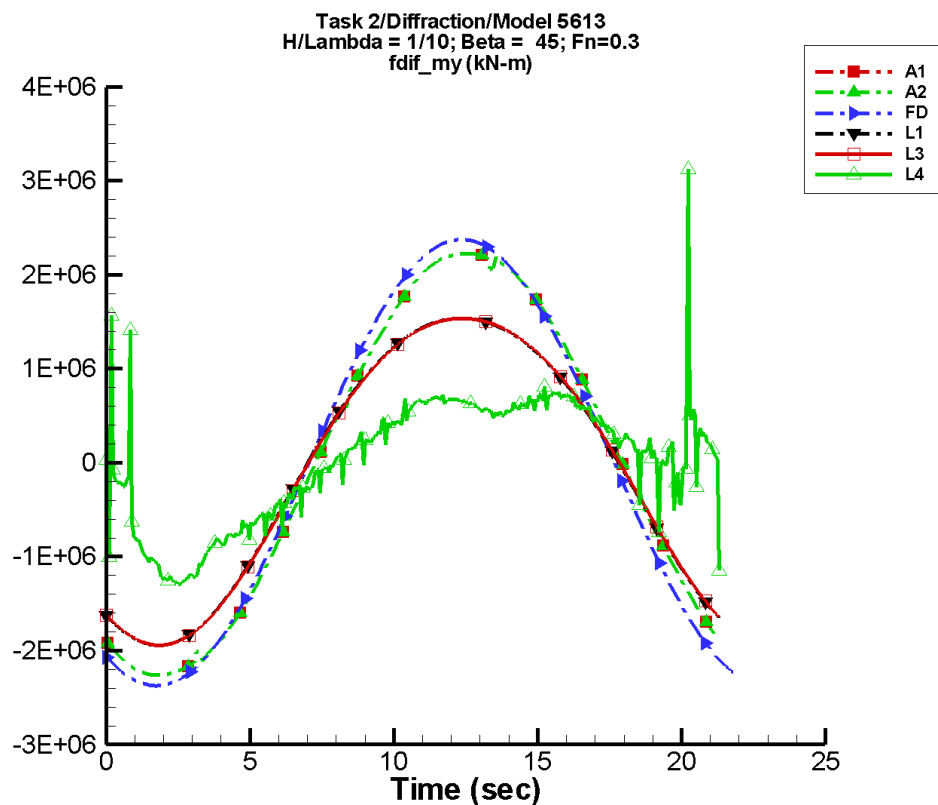
Table G–1925. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	7.29E-02	18.3	171	8.75E-02	31
A2	7.29E-02	18.3	171	8.75E-02	31
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-1.89E-03	3.10E-02	-52	4.56E-02	-39

Table G–1926. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-19.2	19.0	-18.9	18.8
A2	-19.2	19.0	-18.9	18.8
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.558	0.650	-0.124	0.131

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–964. Time history of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1927. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	0.109	27.4	171	0.131	31
A2	0.109	27.4	171	0.131	31
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1928. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

| Code | Unfiltered | | Filtered | |
	Minimum (kN-m)	Maximum (kN-m)	Minimum (kN-m)	Maximum (kN-m)
A1	-28.8	28.6	-28.4	28.2
A2	-28.8	28.6	-28.4	28.2
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–965. Time history of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
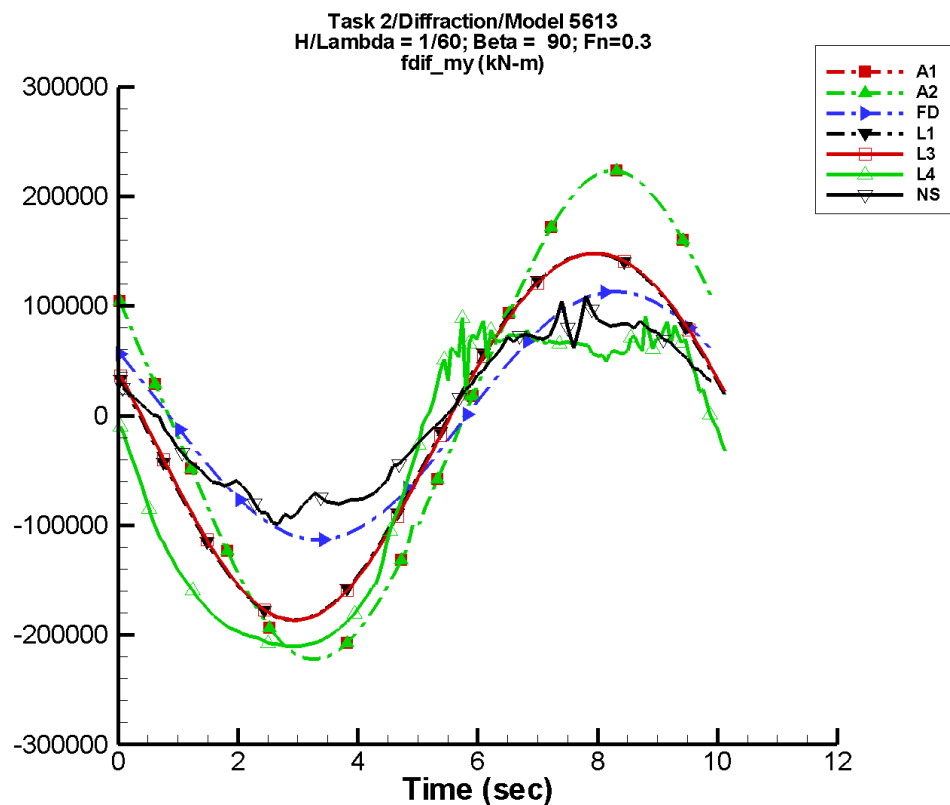
Table G–1929. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-117.	5.94E+04	-18	106.	-124
A2	-117.	5.94E+04	-18	106.	-124
FD	33.0	8.00E+04	-31	37.0	-2
L1	-2.94E+03	5.33E+04	-21	2.76E+03	-85
L3	-2.94E+03	5.33E+04	-22	2.76E+03	-85
L4	-1.50E+03	5.24E+04	-23	2.26E+03	168
NF	—	—	—	—	—
NS	-739.	4.92E+04	-17	4.51E+03	117

Table G–1930. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

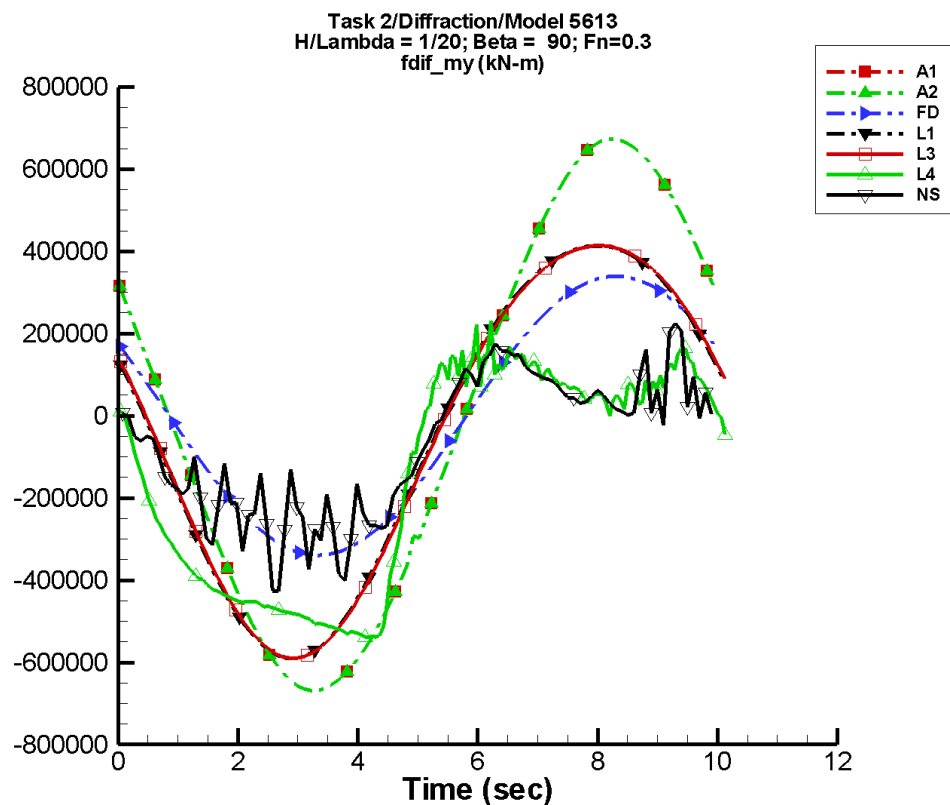| Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-6.05E+04	6.06E+04	-5.98E+04	5.99E+04
A2	-6.05E+04	6.06E+04	-5.98E+04	5.99E+04
FD	-8.00E+04	8.00E+04	-7.92E+04	7.92E+04
L1	-5.45E+04	5.24E+04	-5.44E+04	5.22E+04
L3	-5.46E+04	5.23E+04	-5.44E+04	5.21E+04
L4	-5.51E+04	5.61E+04	-5.29E+04	5.27E+04
NF	—	—	—	—
NS	-5.12E+04	4.70E+04	-5.06E+04	4.64E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 45; Fn=0.0
fdif_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–966. Time history of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
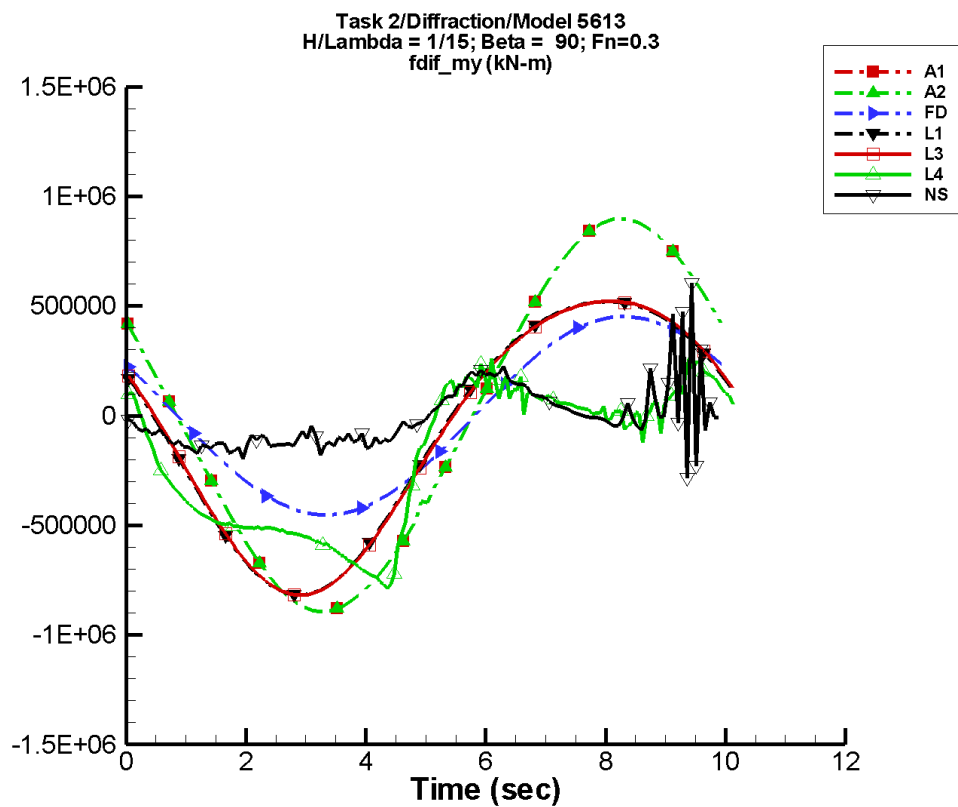
Table G–1931. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-353.	1.79E+05	-18	318.	-124
A2	-353.	1.79E+05	-18	318.	-124
FD	98.9	2.40E+05	-31	111.	-2
L1	-2.67E+04	1.60E+05	-21	2.49E+04	-86
L3	-2.67E+04	1.60E+05	-22	2.49E+04	-86
L4	-1.26E+04	1.58E+05	-27	1.99E+04	171
NF	—	—	—	—	—
NS	-4.52E+03	1.87E+05	-24	3.70E+04	132

Table G–1932. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.82E+05	1.82E+05	-1.80E+05	1.80E+05
A2	-1.82E+05	1.82E+05	-1.80E+05	1.80E+05
FD	-2.40E+05	2.40E+05	-2.38E+05	2.38E+05
L1	-1.75E+05	1.53E+05	-1.75E+05	1.52E+05
L3	-1.76E+05	1.53E+05	-1.76E+05	1.52E+05
L4	-1.91E+05	1.68E+05	-1.58E+05	1.53E+05
NF	—	—	—	—
NS	-2.08E+05	2.10E+05	-2.00E+05	1.87E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–967. Time history of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
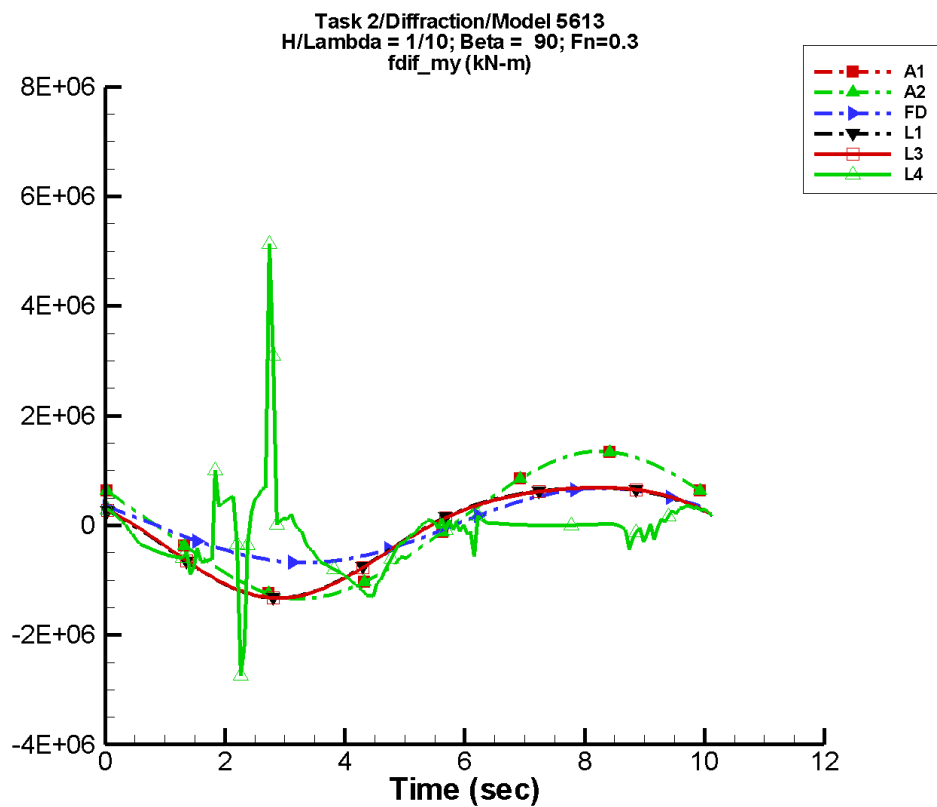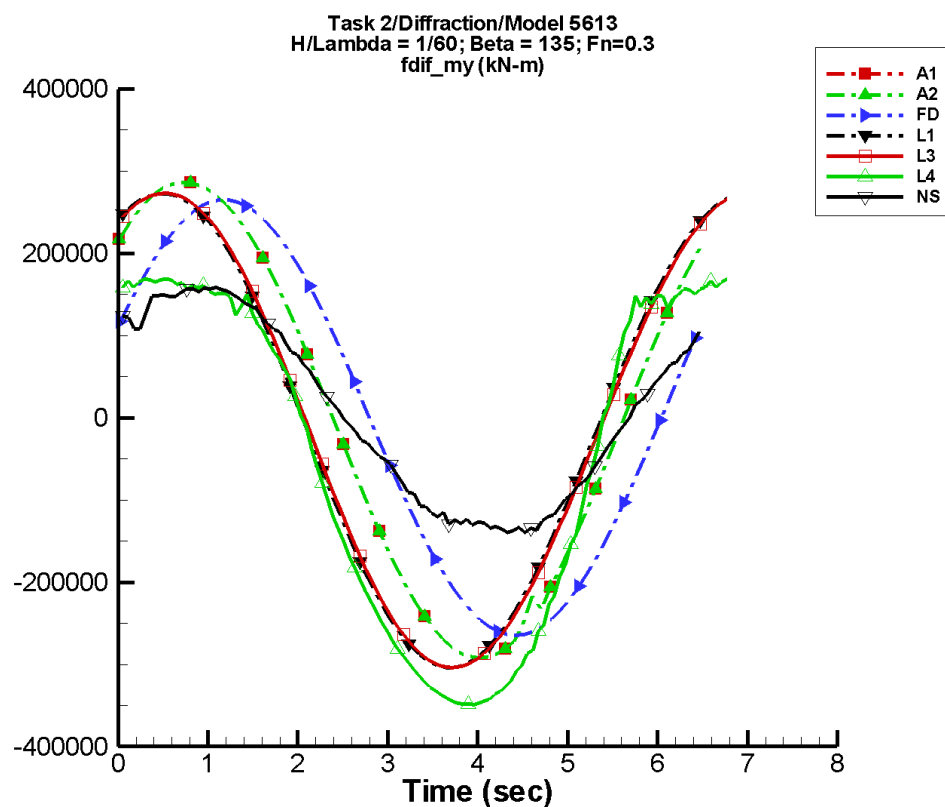
Table G–1933. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-472.	2.39E+05	-18	425.	-124
A2	-472.	2.39E+05	-18	425.	-124
FD	132.	3.20E+05	-31	148.	-2
L1	-4.75E+04	2.13E+05	-21	4.43E+04	-86
L3	-4.75E+04	2.13E+05	-22	4.43E+04	-86
L4	-1.59E+04	2.09E+05	-27	3.67E+04	-173
NF	—	—	—	—	—
NS	-3.94E+03	2.73E+05	-30	8.21E+04	156

Table G–1934. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.43E+05	2.43E+05	-2.40E+05	2.41E+05
A2	-2.43E+05	2.43E+05	-2.40E+05	2.41E+05
FD	-3.20E+05	3.20E+05	-3.17E+05	3.17E+05
L1	-2.45E+05	2.03E+05	-2.44E+05	2.01E+05
L3	-2.47E+05	2.02E+05	-2.46E+05	2.00E+05
L4	-2.75E+05	2.49E+05	-2.03E+05	2.06E+05
NF	—	—	—	—
NS	-3.31E+05	3.42E+05	-2.96E+05	3.14E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–968. Time history of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1935. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
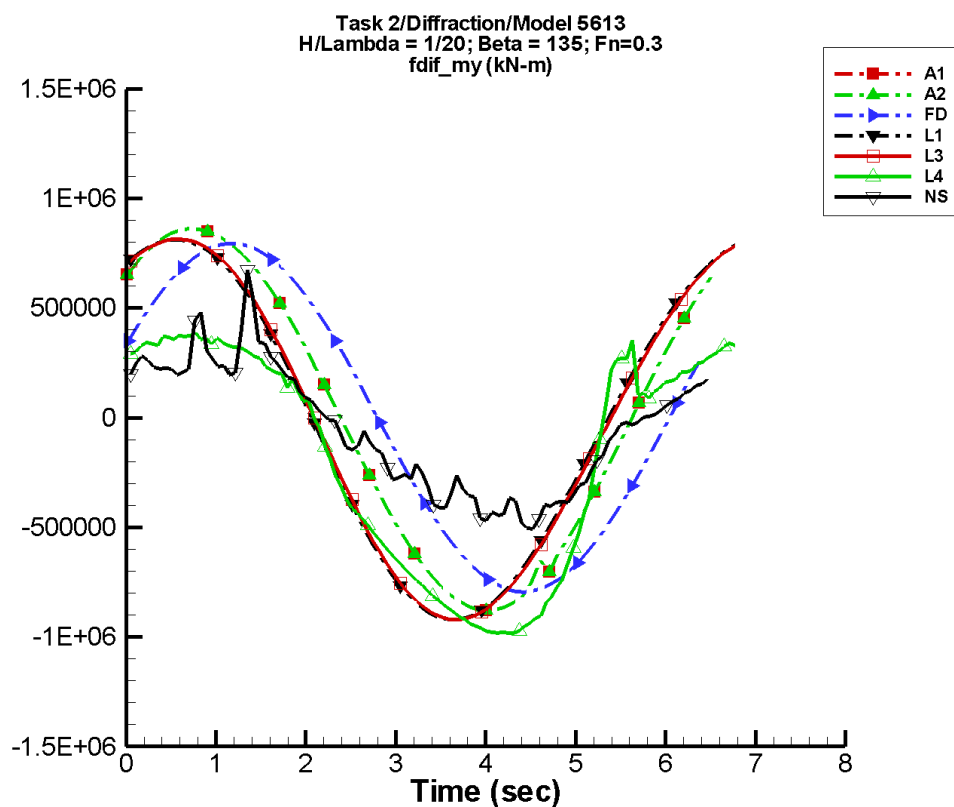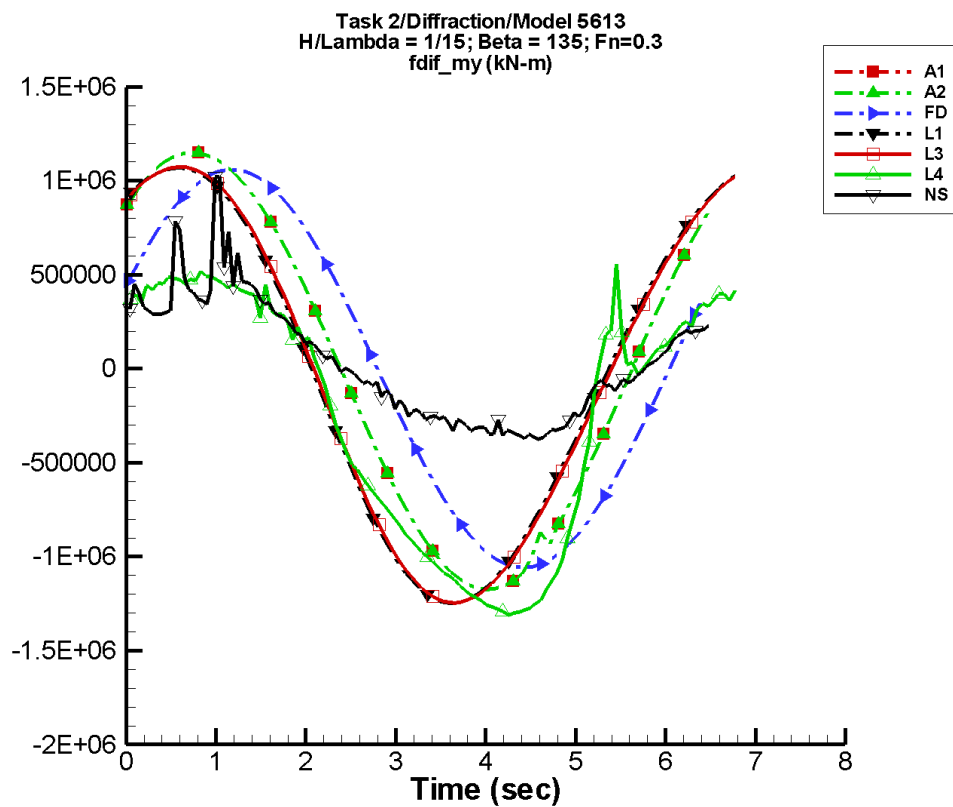
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-708.	3.58E+05	-18	638.	-124
A2	-708.	3.58E+05	-18	638.	-124
FD	198.	4.80E+05	-31	222.	-2
L1	-1.07E+05	3.20E+05	-21	9.97E+04	-86
L3	-1.07E+05	3.20E+05	-22	9.97E+04	-86
L4	-5.58E+04	3.22E+05	-27	1.06E+05	-155
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1936. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

| | Unfiltered | | Filtered | |
| | Minimum | Maximum | Minimum | Maximum |
Code	(kN-m)	(kN-m)	(kN-m)	(kN-m)
A1	-3.64E+05	3.65E+05	-3.60E+05	3.61E+05
A2	-3.64E+05	3.65E+05	-3.60E+05	3.61E+05
FD	-4.80E+05	4.80E+05	-4.75E+05	4.75E+05
L1	-4.12E+05	2.99E+05	-4.11E+05	2.96E+05
L3	-4.16E+05	2.97E+05	-4.14E+05	2.95E+05
L4	-4.16E+05	4.23E+05	-3.88E+05	3.31E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.0
fdif_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–969. Time history of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
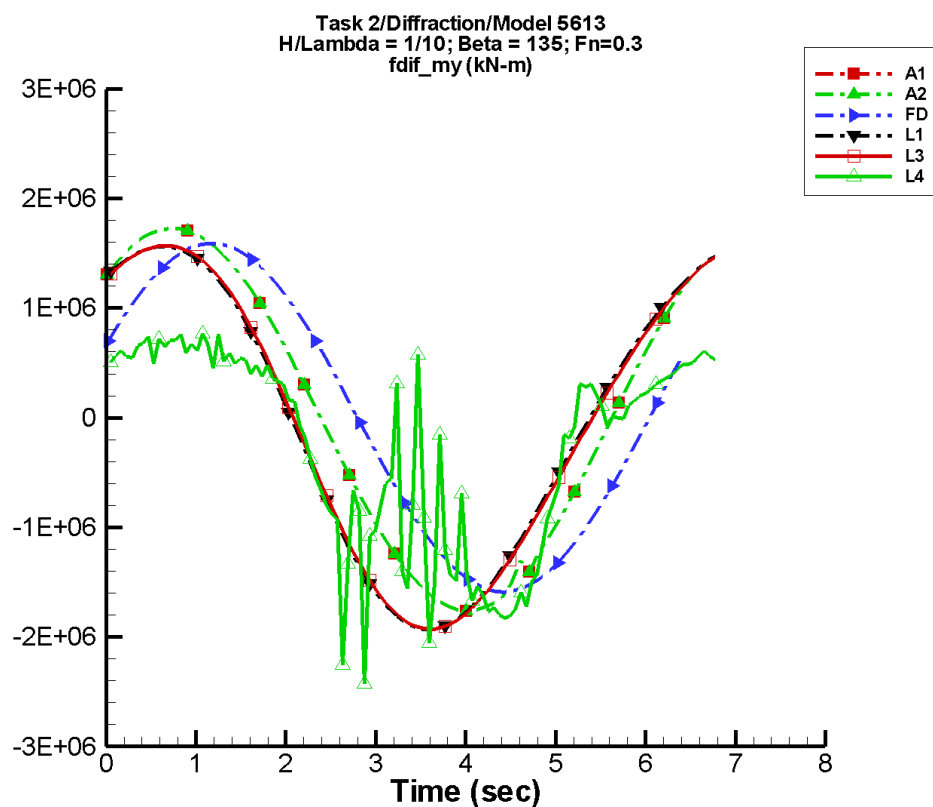
Table G–1937. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-44.3	4.52E+04	79	77.9	-74
A2	-44.3	4.52E+04	79	77.9	-74
FD	-19.3	6.66E+04	71	29.2	107
L1	-1.45E+03	4.07E+04	73	2.95E+03	-22
L3	-1.45E+03	4.07E+04	72	2.95E+03	-22
L4	-2.69E+03	3.89E+04	71	1.17E+04	-44
NF	—	—	—	—	—
NS	-1.03E+03	3.12E+04	83	7.82E+03	-46

Table G–1938. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.50E+04	4.50E+04	-4.43E+04	4.49E+04
A2	-4.50E+04	4.50E+04	-4.43E+04	4.49E+04
FD	-6.66E+04	6.66E+04	-6.59E+04	6.64E+04
L1	-4.20E+04	4.02E+04	-4.18E+04	4.01E+04
L3	-4.19E+04	4.03E+04	-4.17E+04	4.02E+04
L4	-5.26E+04	4.27E+04	-4.80E+04	4.11E+04
NF	—	—	—	—
NS	-4.17E+04	3.12E+04	-3.91E+04	2.98E+04

Task 2/Diffraction/Model 5613
H/Lambda = 1/20; Beta = 90; Fn=0.0
fdif_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–970. Time history of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
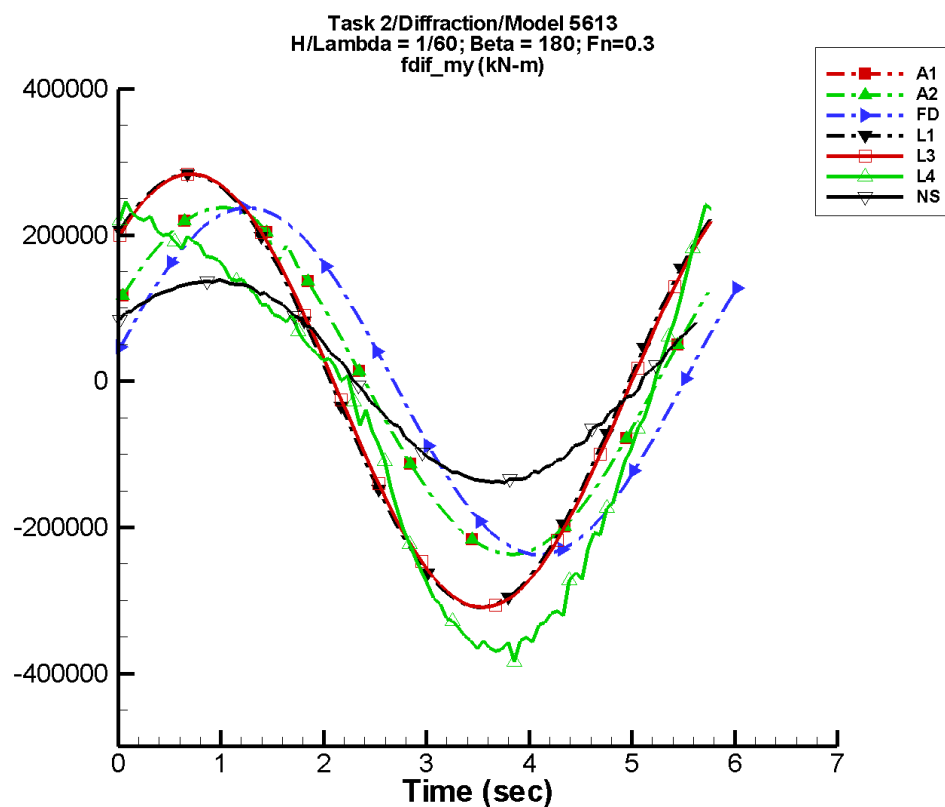
Table G–1939. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-133.	1.36E+05	79	234.	-74
A2	-133.	1.36E+05	79	234.	-74
FD	-58.0	2.00E+05	71	87.7	107
L1	-1.29E+04	1.22E+05	73	2.64E+04	-22
L3	-1.29E+04	1.22E+05	72	2.64E+04	-22
L4	-1.00E+04	1.25E+05	67	8.45E+04	-42
NF	—	—	—	—	—
NS	-5.52E+03	1.01E+05	79	8.09E+04	-44

Table G–1940. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.35E+05	1.35E+05	-1.33E+05	1.35E+05
A2	-1.35E+05	1.35E+05	-1.33E+05	1.35E+05
FD	-2.00E+05	2.00E+05	-1.98E+05	1.99E+05
L1	-1.40E+05	1.23E+05	-1.40E+05	1.22E+05
L3	-1.39E+05	1.23E+05	-1.39E+05	1.23E+05
L4	-2.66E+05	2.07E+05	-2.20E+05	1.68E+05
NF	—	—	—	—
NS	-2.00E+05	2.04E+05	-1.80E+05	1.51E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–971. Time history of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
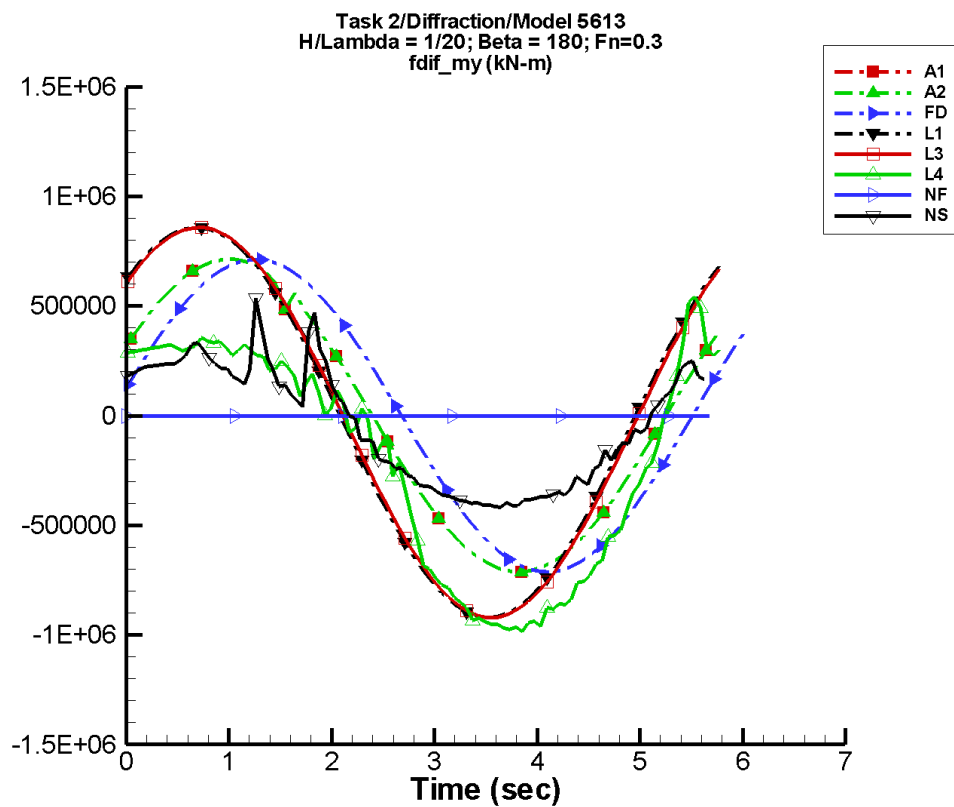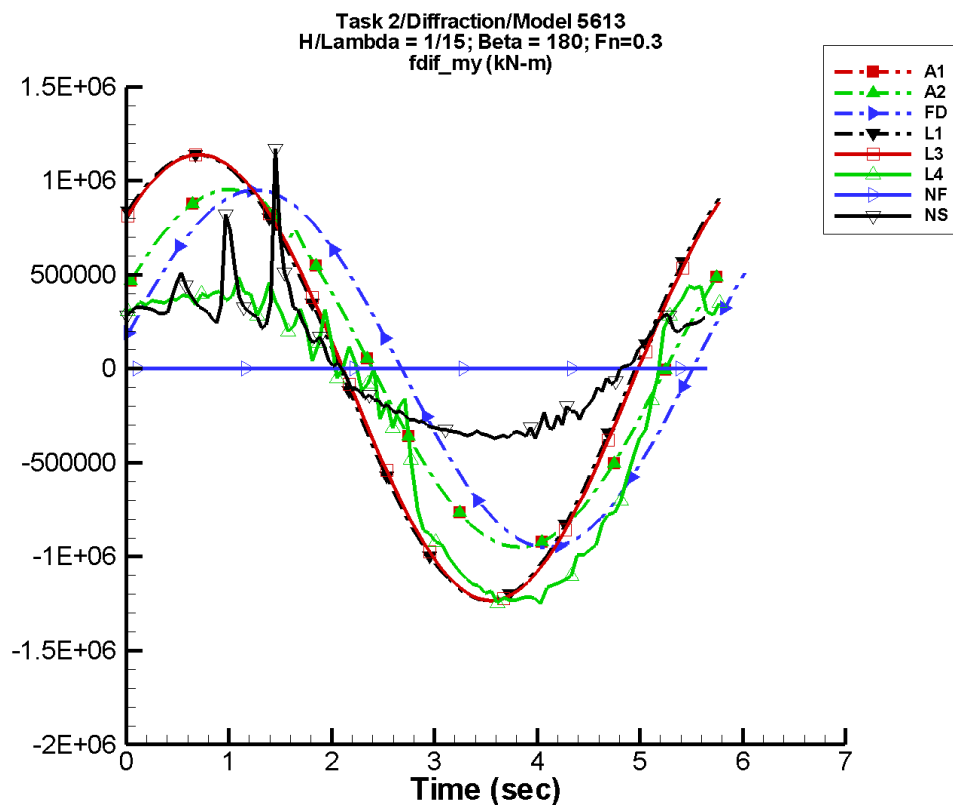
Table G–1941. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-178.	1.82E+05	79	313.	-74
A2	-178.	1.82E+05	79	313.	-74
FD	-77.3	2.67E+05	71	117.	107
L1	-2.30E+04	1.63E+05	73	4.69E+04	-22
L3	-2.30E+04	1.63E+05	72	4.70E+04	-22
L4	-9.09E+03	1.74E+05	66	1.43E+05	-44
NF	—	—	—	—	—
NS	-1.31E+03	1.84E+05	75	1.67E+05	-39

Table G–1942. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.81E+05	1.81E+05	-1.78E+05	1.80E+05
A2	-1.81E+05	1.81E+05	-1.78E+05	1.80E+05
FD	-2.67E+05	2.67E+05	-2.64E+05	2.66E+05
L1	-2.00E+05	1.67E+05	-1.99E+05	1.66E+05
L3	-1.98E+05	1.68E+05	-1.97E+05	1.67E+05
L4	-3.73E+05	3.08E+05	-3.48E+05	2.62E+05
NF	—	—	—	—
NS	-3.46E+05	3.42E+05	-3.32E+05	3.11E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–972. Time history of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
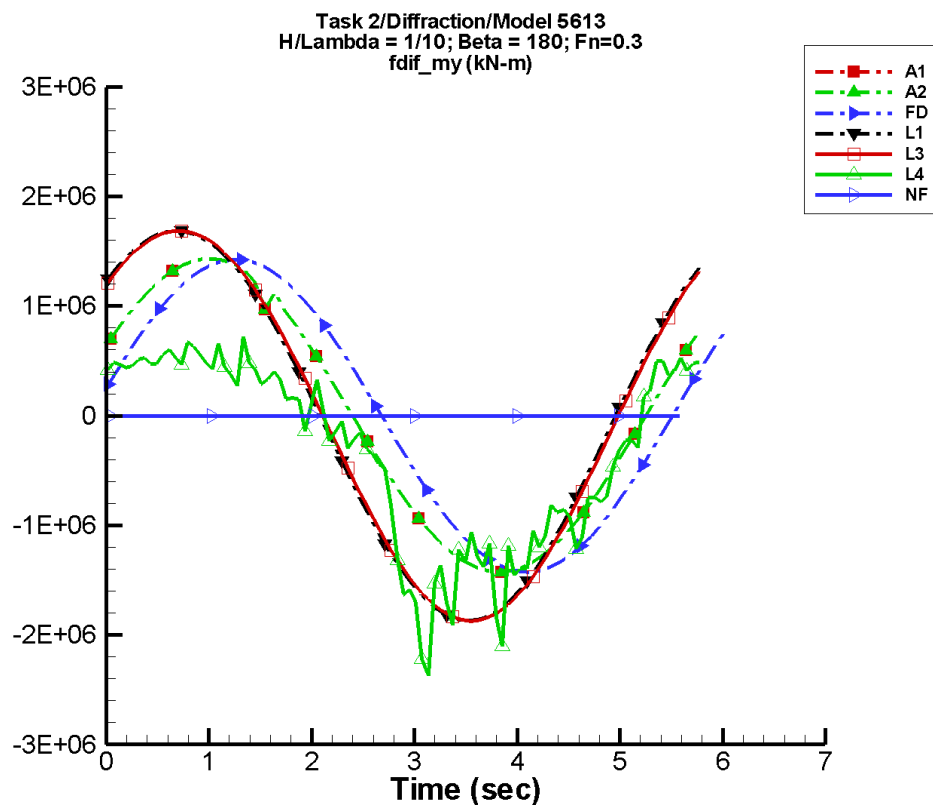
Table G–1943. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-267.	2.72E+05	79	469.	-74
A2	-267.	2.72E+05	79	469.	-74
FD	-116.	4.00E+05	71	175.	107
L1	-5.17E+04	2.44E+05	73	1.06E+05	-22
L3	-5.17E+04	2.44E+05	72	1.06E+05	-22
L4	-8.63E+03	3.38E+05	69	2.71E+05	-46
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1944. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.71E+05	2.71E+05	-2.67E+05	2.70E+05
A2	-2.71E+05	2.71E+05	-2.67E+05	2.70E+05
FD	-4.00E+05	4.00E+05	-3.96E+05	3.98E+05
L1	-3.43E+05	2.62E+05	-3.41E+05	2.60E+05
L3	-3.40E+05	2.64E+05	-3.38E+05	2.62E+05
L4	-7.71E+05	6.41E+05	-7.26E+05	4.78E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–973. Time history of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
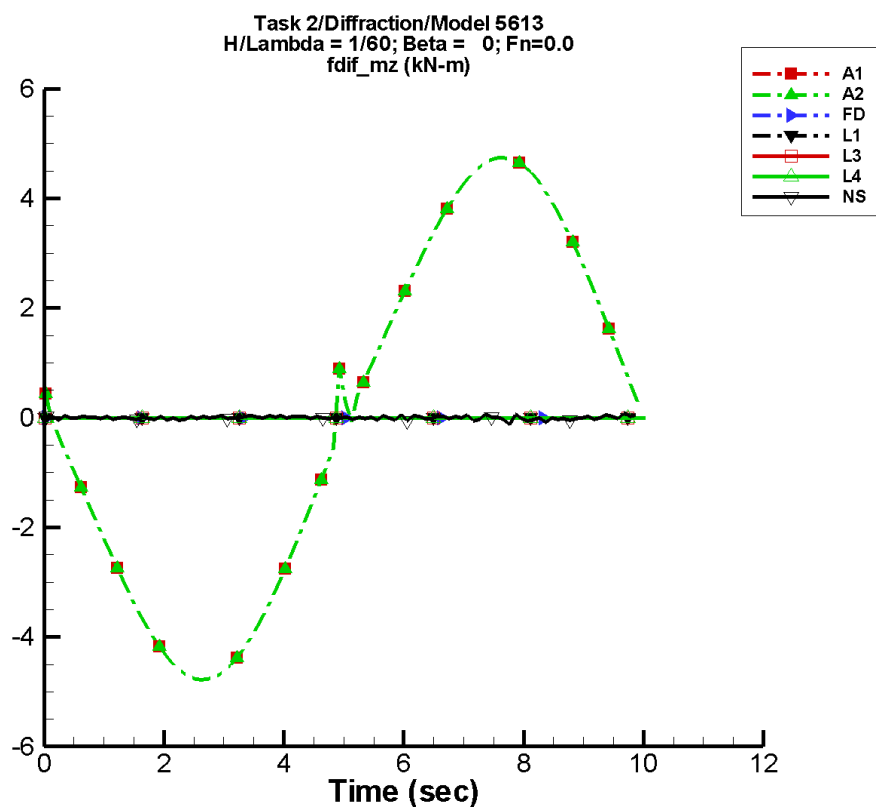
Table G–1945. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	141.	5.72E+04	179	131.	67
A2	141.	5.72E+04	179	131.	67
FD	-24.3	8.00E+04	171	35.3	-161
L1	1.67E+03	5.29E+04	174	4.89E+03	125
L3	1.67E+03	5.29E+04	173	4.89E+03	125
L4	970.	4.99E+04	172	9.23E+03	115
NF	—	—	—	—	—
NS	-605.	4.86E+04	179	2.63E+03	131

Table G–1946. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-5.82E+04	5.80E+04	-5.75E+04	5.73E+04
A2	-5.82E+04	5.80E+04	-5.75E+04	5.73E+04
FD	-8.00E+04	8.00E+04	-7.92E+04	8.00E+04
L1	-5.49E+04	5.18E+04	-5.47E+04	5.16E+04
L3	-5.48E+04	5.20E+04	-5.45E+04	5.18E+04
L4	-6.20E+04	4.82E+04	-5.66E+04	4.57E+04
NF	—	—	—	—
NS	-5.09E+04	4.50E+04	-5.04E+04	4.41E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–974. Time history of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
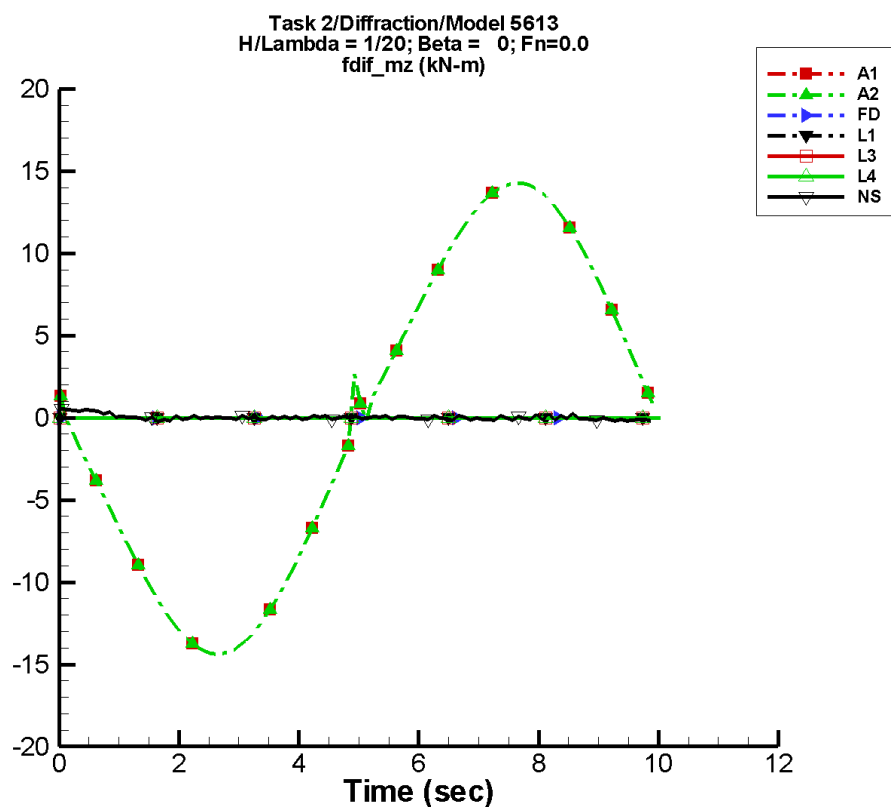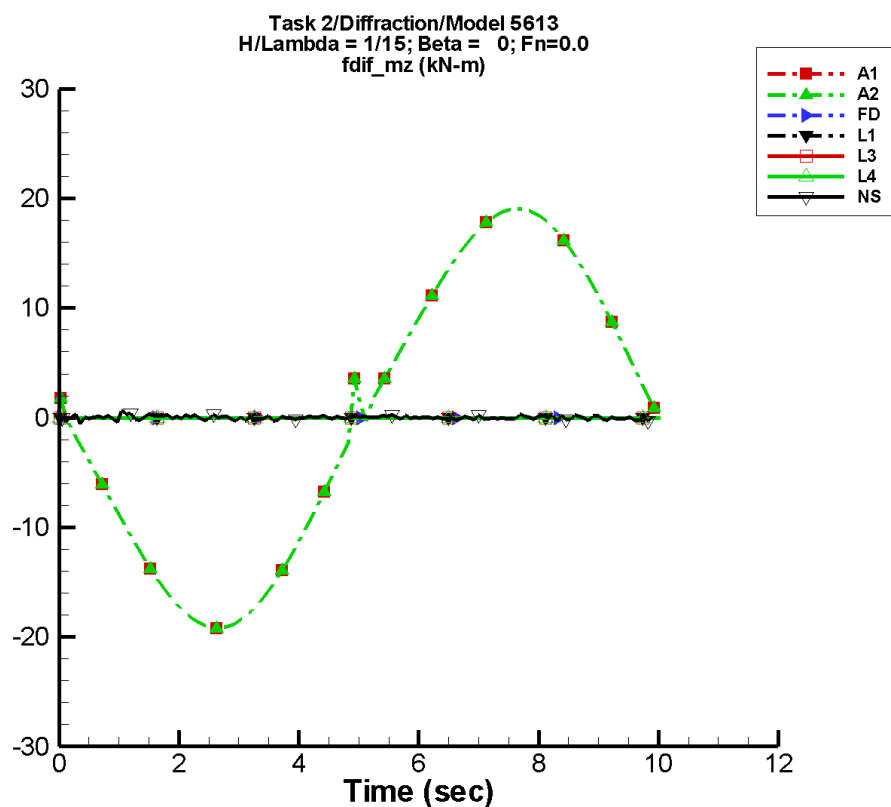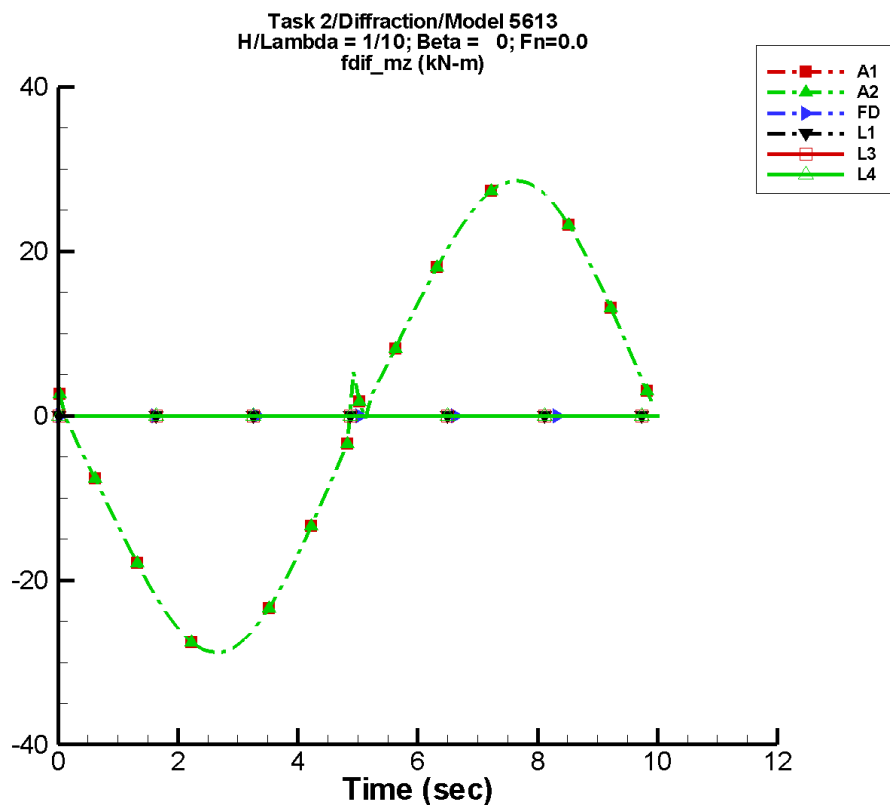
Table G–1947. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	425.	1.72E+05	179	395.	67
A2	425.	1.72E+05	179	395.	67
FD	-72.8	2.40E+05	171	106.	-161
L1	1.51E+04	1.59E+05	174	4.38E+04	125
L3	1.51E+04	1.59E+05	173	4.38E+04	125
L4	6.30E+03	1.39E+05	164	7.09E+04	107
NF	—	—	—	—	—
NS	-2.96E+03	1.82E+05	171	2.72E+04	131

Table G–1948. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

| Code | Unfiltered | | Filtered | |
	Minimum (kN-m)	Maximum (kN-m)	Minimum (kN-m)	Maximum (kN-m)
A1	-1.75E+05	1.74E+05	-1.73E+05	1.72E+05
A2	-1.75E+05	1.74E+05	-1.73E+05	1.72E+05
FD	-2.40E+05	2.40E+05	-2.38E+05	2.40E+05
L1	-1.80E+05	1.65E+05	-1.79E+05	1.64E+05
L3	-1.80E+05	1.66E+05	-1.79E+05	1.66E+05
L4	-2.37E+05	1.75E+05	-2.03E+05	1.57E+05
NF	—	—	—	—
NS	-2.07E+05	2.04E+05	-1.99E+05	1.78E+05

Data identically zero, insufficient, or not available from NFA.

Figure G–975. Time history of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
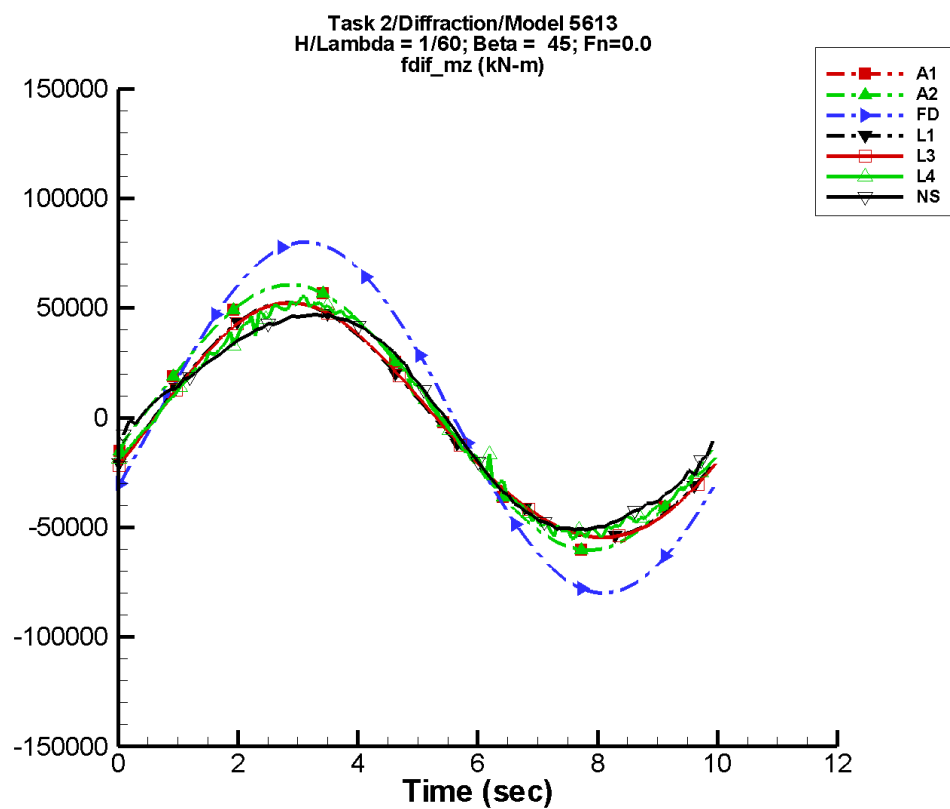
Table G–1949. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	567.	2.30E+05	179	527.	67
A2	567.	2.30E+05	179	527.	67
FD	-97.0	3.20E+05	171	141.	-161
L1	2.69E+04	2.11E+05	174	7.77E+04	125
L3	2.68E+04	2.11E+05	173	7.77E+04	125
L4	1.19E+04	1.83E+05	159	1.24E+05	103
NF	—	—	—	—	—
NS	-548.	2.59E+05	169	6.97E+04	134

Table G–1950. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.34E+05	2.33E+05	-2.31E+05	2.30E+05
A2	-2.34E+05	2.33E+05	-2.31E+05	2.30E+05
FD	-3.20E+05	3.20E+05	-3.17E+05	3.20E+05
L1	-2.52E+05	2.35E+05	-2.50E+05	2.34E+05
L3	-2.51E+05	2.37E+05	-2.49E+05	2.36E+05
L4	-3.34E+05	4.82E+05	-2.85E+05	2.57E+05
NF	—	—	—	—
NS	-2.89E+05	3.18E+05	-2.81E+05	2.84E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–976. Time history of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1951. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
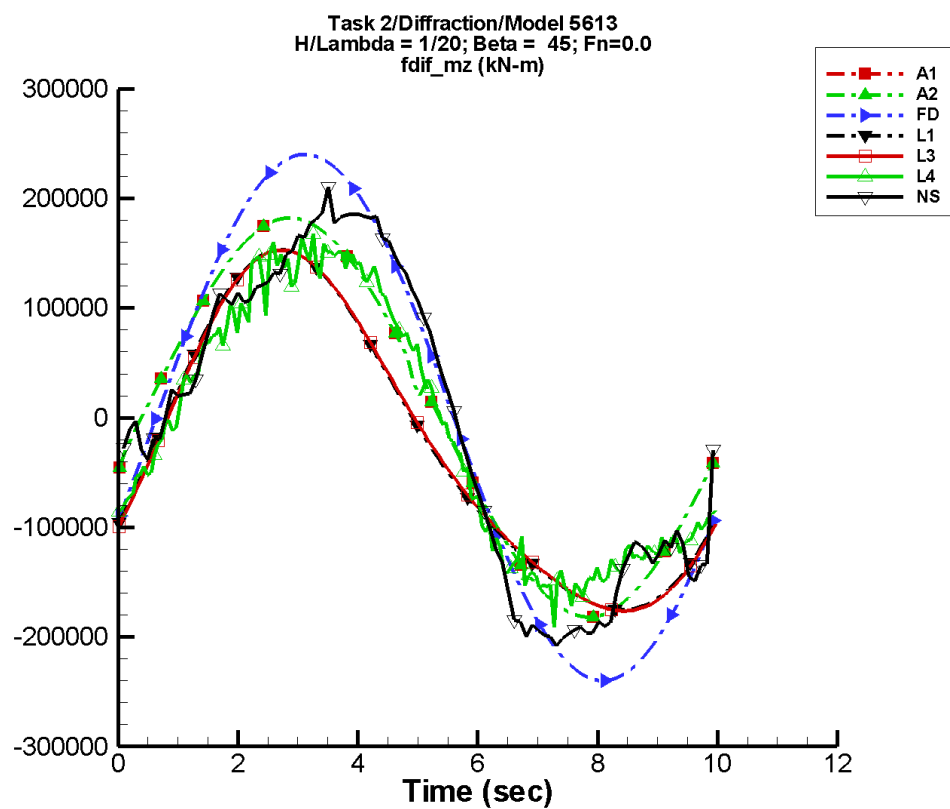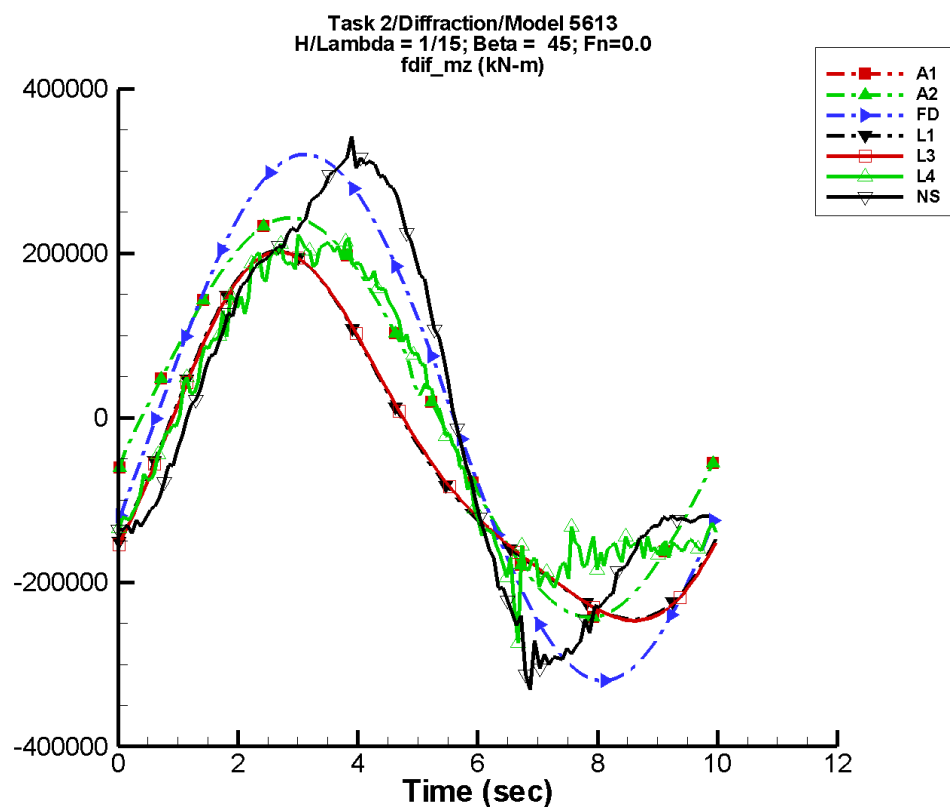
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	850.	3.44E+05	179	791.	67
A2	850.	3.44E+05	179	791.	67
FD	-146.	4.80E+05	171	212.	-161
L1	6.04E+04	3.17E+05	174	1.75E+05	125
L3	6.04E+04	3.17E+05	173	1.75E+05	125
L4	5.44E+04	2.94E+05	151	2.88E+05	98
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1952. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.51E+05	3.49E+05	-3.46E+05	3.45E+05
A2	-3.51E+05	3.49E+05	-3.46E+05	3.45E+05
FD	-4.80E+05	4.80E+05	-4.75E+05	4.80E+05
L1	-4.14E+05	4.11E+05	-4.10E+05	4.08E+05
L3	-4.12E+05	4.15E+05	-4.08E+05	4.13E+05
L4	-5.09E+05	5.60E+05	-4.61E+05	5.53E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–977. Time history of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
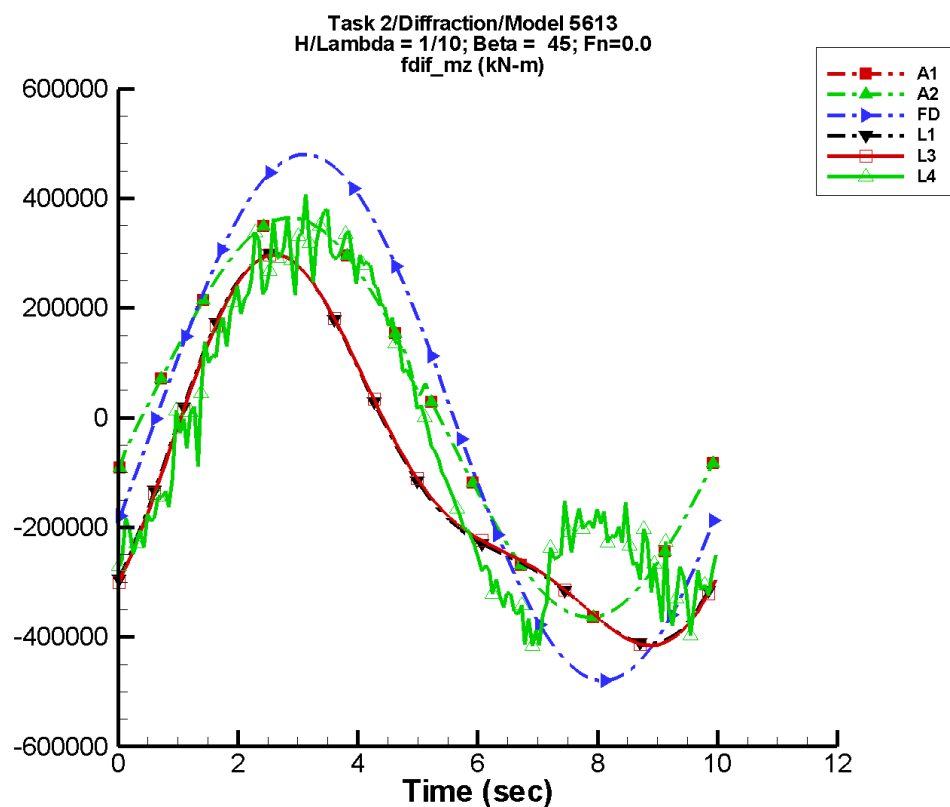
Table G–1953. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	1.12E-03	1.23	51	4.74E-03	155
A2	1.12E-03	1.23	51	4.74E-03	155
FD	1.08E-06	8.28E-03	16	3.48E-06	45
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	3.16E-03	1.25E-02	-171	1.39E-02	136

Table G–1954. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.20	1.24	-1.19	1.23
A2	-1.20	1.24	-1.19	1.23
FD	-8.28E-03	8.28E-03	-8.21E-03	8.20E-03
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-9.67E-02	5.95E-02	-3.28E-02	2.77E-02

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–978. Time history of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
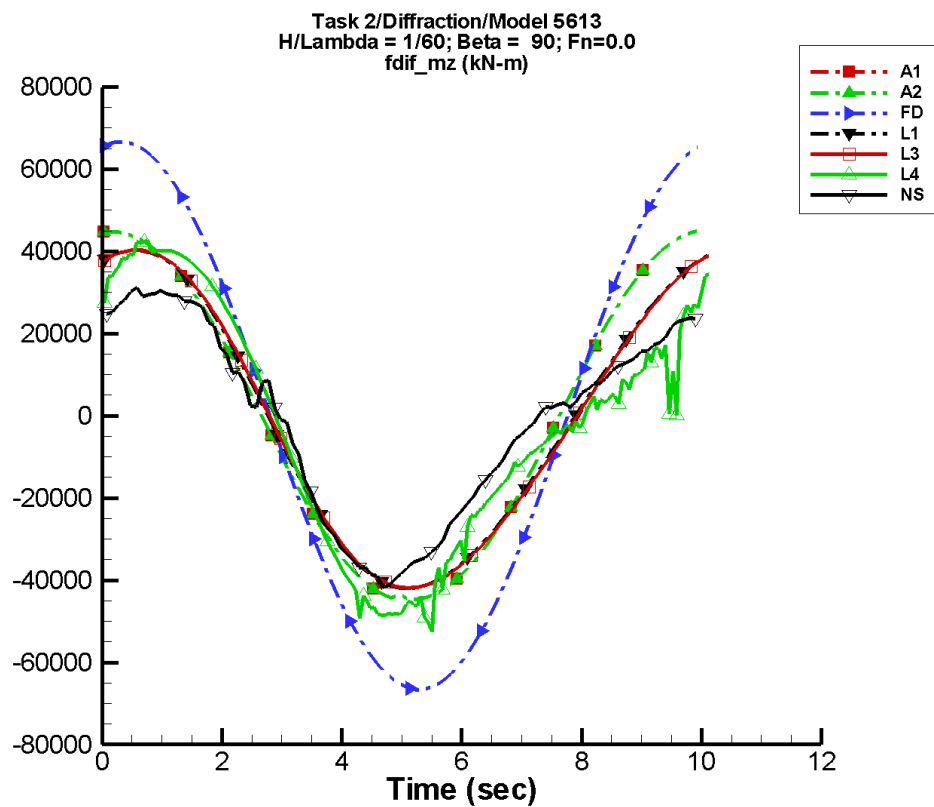
Table G–1955. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	3.38E-03	3.70	51	1.43E-02	155
A2	3.38E-03	3.70	51	1.43E-02	155
FD	3.23E-06	2.49E-02	16	1.04E-05	45
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-2.23E-03	2.68E-02	164	1.76E-02	-141

Table G–1956. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.60	3.73	-3.57	3.70
A2	-3.60	3.73	-3.57	3.70
FD	-2.49E-02	2.49E-02	-2.46E-02	2.46E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.349	0.519	-0.185	0.146

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–979. Time history of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1957. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
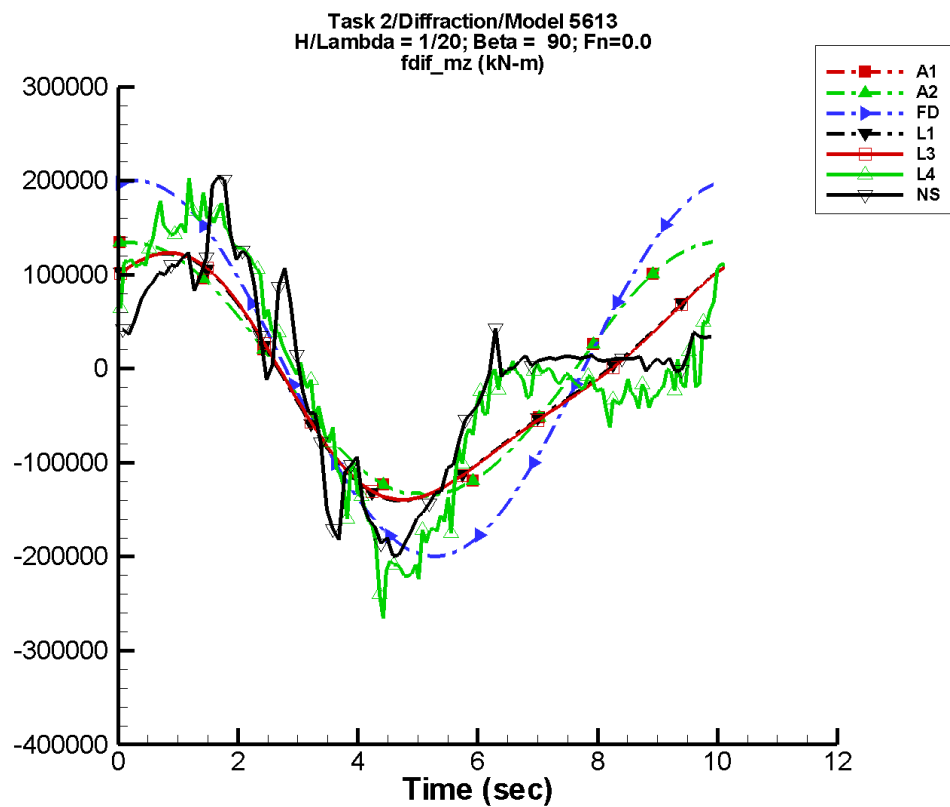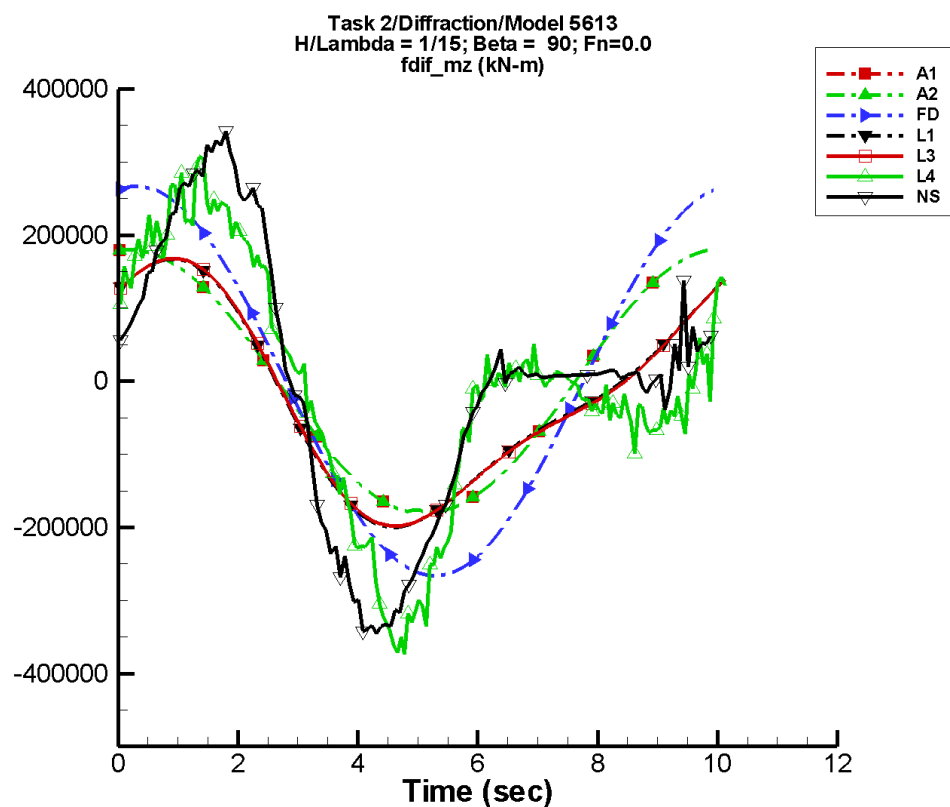
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	4.51E-03	4.94	51	1.90E-02	155
A2	4.51E-03	4.94	51	1.90E-02	155
FD	4.31E-06	3.31E-02	16	1.39E-05	45
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	2.12E-03	9.83E-02	-148	6.85E-02	-118

Table G–1958. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-4.81	4.97	-4.77	4.94
A2	-4.81	4.97	-4.77	4.94
FD	-3.31E-02	3.31E-02	-3.28E-02	3.28E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-3.04	2.89	-0.243	0.187

Task 2/Diffraction/Model 5613
H/Lambda = 1/10; Beta = 180; Fn=0.0
fdif_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–980. Time history of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
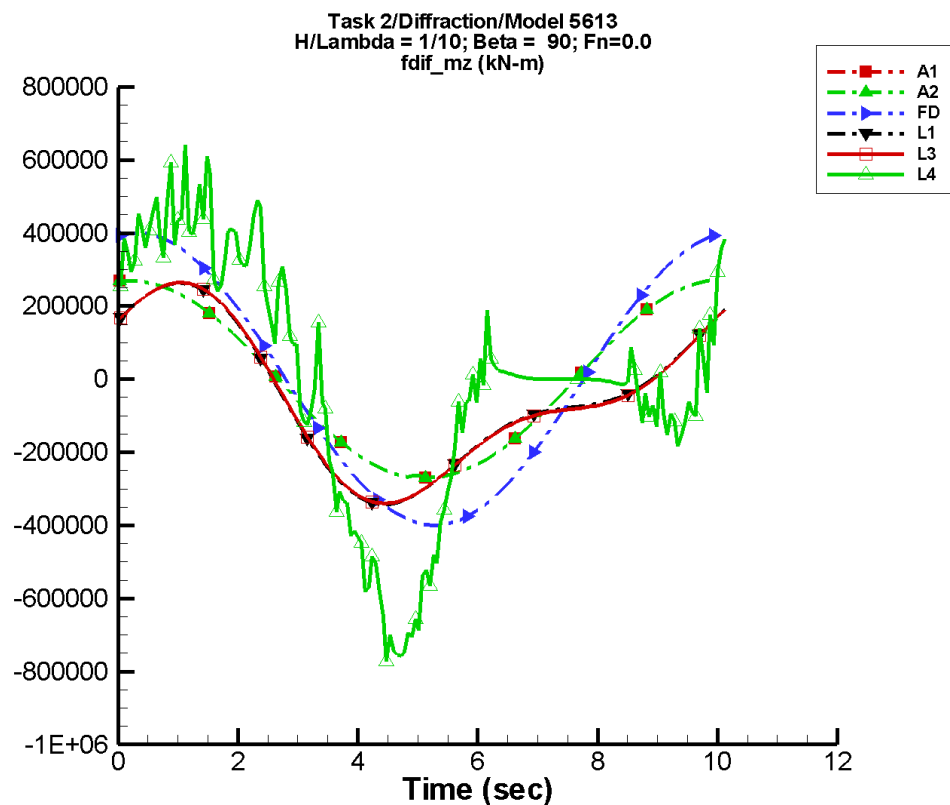
Table G–1959. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	6.77E-03	7.41	51	2.85E-02	155
A2	6.77E-03	7.41	51	2.85E-02	155
FD	6.46E-06	4.97E-02	16	2.09E-05	45
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1960. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.0$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-7.21	7.46	-7.15	7.41
A2	-7.21	7.46	-7.15	7.41
FD	-4.97E-02	4.97E-02	-4.92E-02	4.92E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 0; Fn=0.3
fdif_mz (kN-m)

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–981. Time history of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
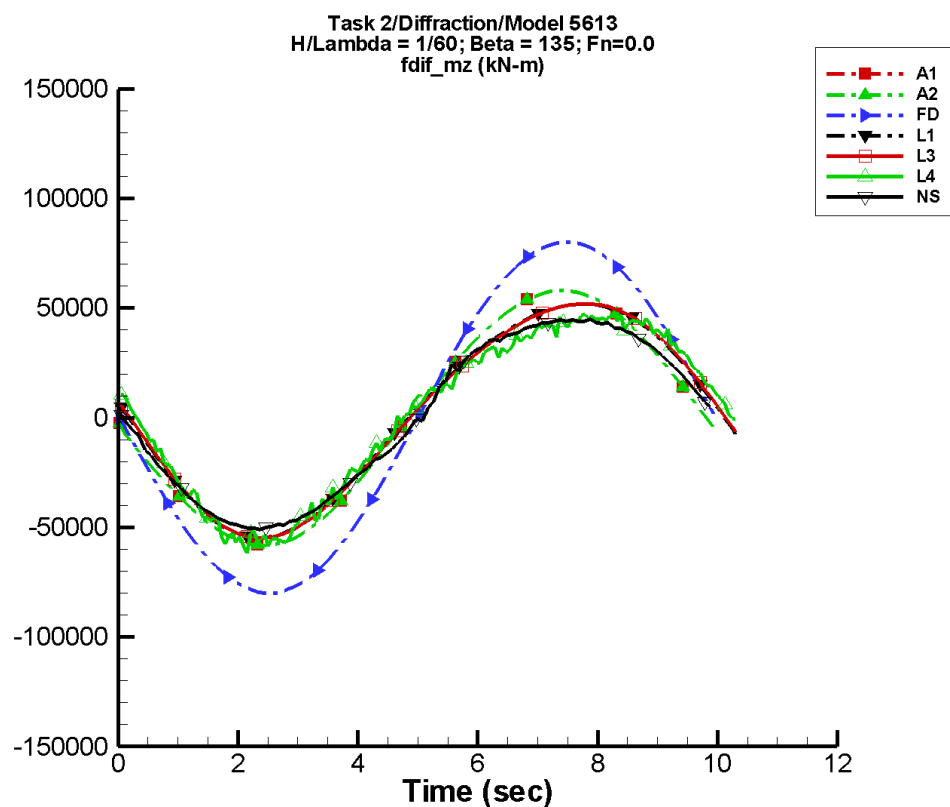
Table G–1961. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-3.36E-03	1.12	127	2.68E-02	-17
A2	-3.36E-03	1.12	127	2.68E-02	-17
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	3.12E-03	7.09E-03	112	3.07E-02	31

Table G–1962. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.20	1.16	-1.17	1.11
A2	-1.20	1.16	-1.17	1.11
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.146	0.205	-9.12E-02	0.157

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–982. Time history of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1963. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
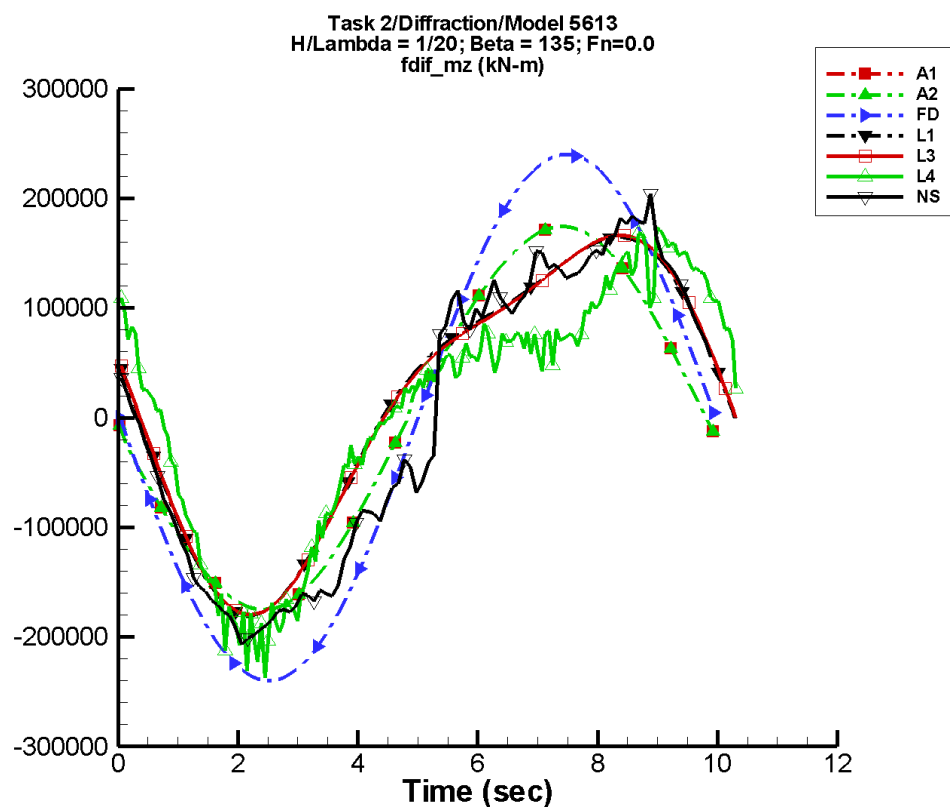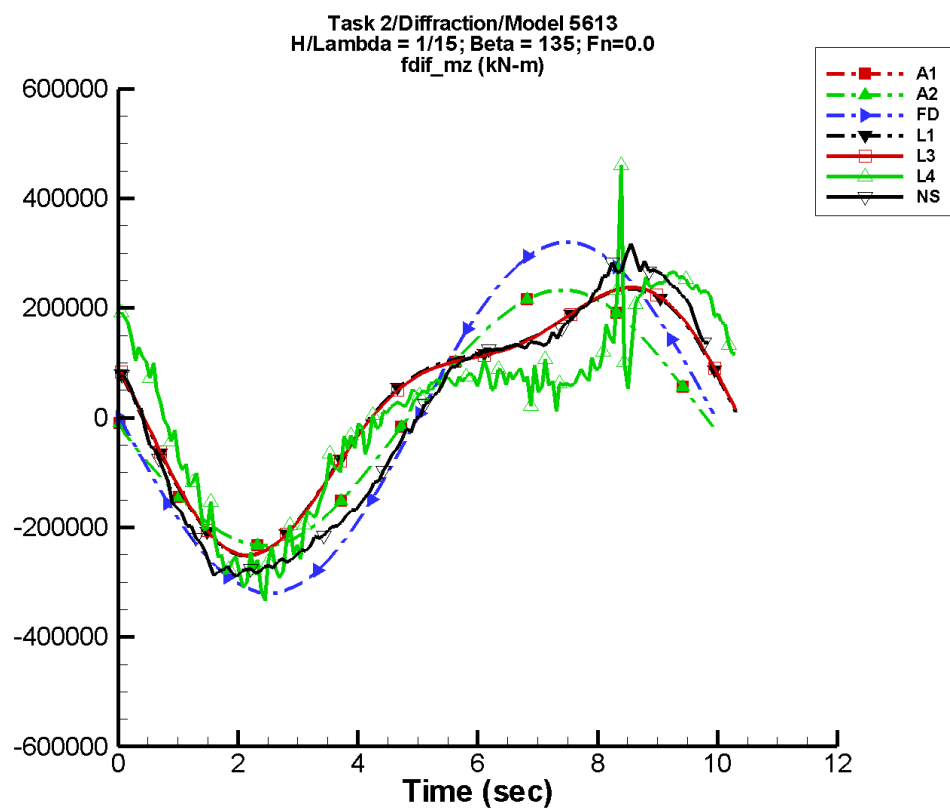
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-1.01E-02	3.37	127	8.07E-02	-17
A2	-1.01E-02	3.37	127	8.07E-02	-17
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	1.31E-02	3.60E-02	13	5.04E-02	131

Table G–1964. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.60	3.48	-3.51	3.33
A2	-3.60	3.48	-3.51	3.33
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.42	1.28	-0.274	0.340

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta =   0; Fn=0.3
fdif_mz (kN-m)

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–983. Time history of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
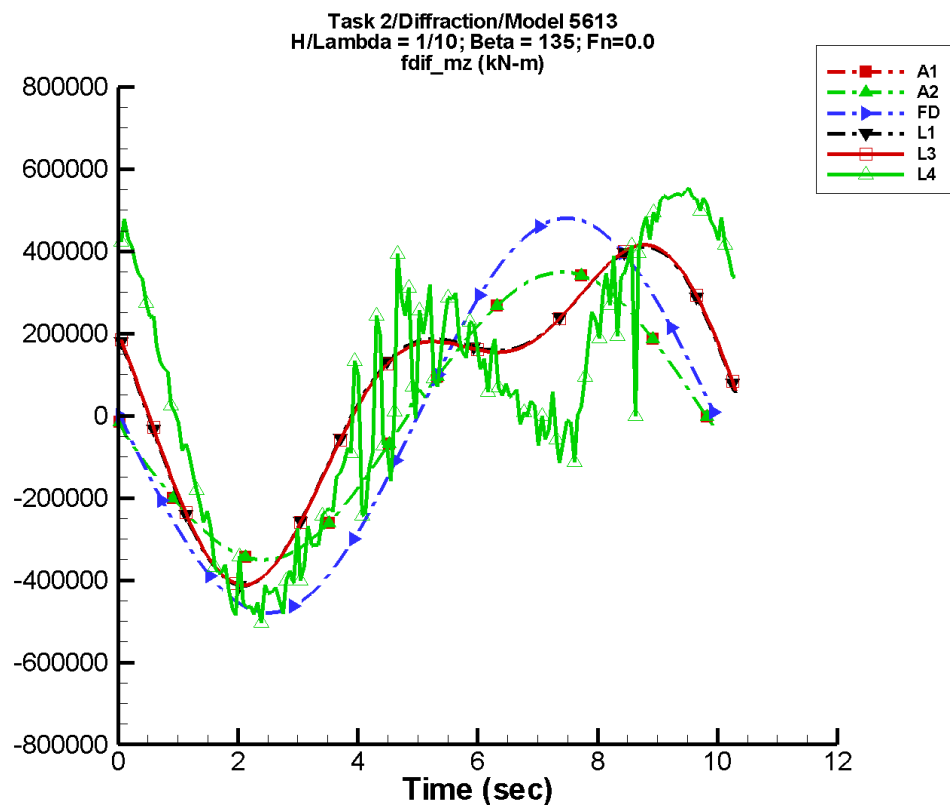
Table G–1965. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-1.35E-02	4.50	127	0.108	-17
A2	-1.35E-02	4.50	127	0.108	-17
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	2.26E-02	8.43E-02	170	5.69E-02	-130

Table G–1966. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-4.80	4.65	-4.69	4.44
A2	-4.80	4.65	-4.69	4.44
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.376	0.526	-0.245	0.363

Data identically zero, insufficient, or not available from FREDYN, LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–984. Time history of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
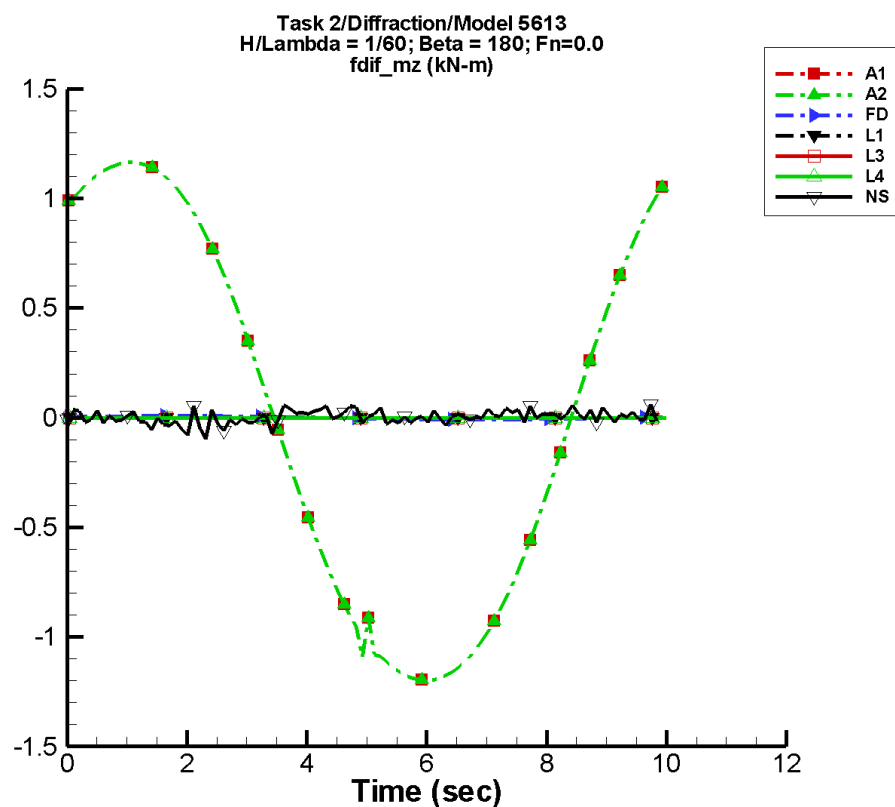
Table G–1967. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-2.02E-02	6.76	127	0.162	-17
A2	-2.02E-02	6.76	127	0.162	-17
FD	—	—	—	—	—
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1968. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 0°$, $F_n = 0.3$, and period = 40.02 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-7.20	6.98	-7.03	6.66
A2	-7.20	6.98	-7.03	6.66
FD	—	—	—	—
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 45; Fn=0.3
fdif_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–985. Time history of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1969. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
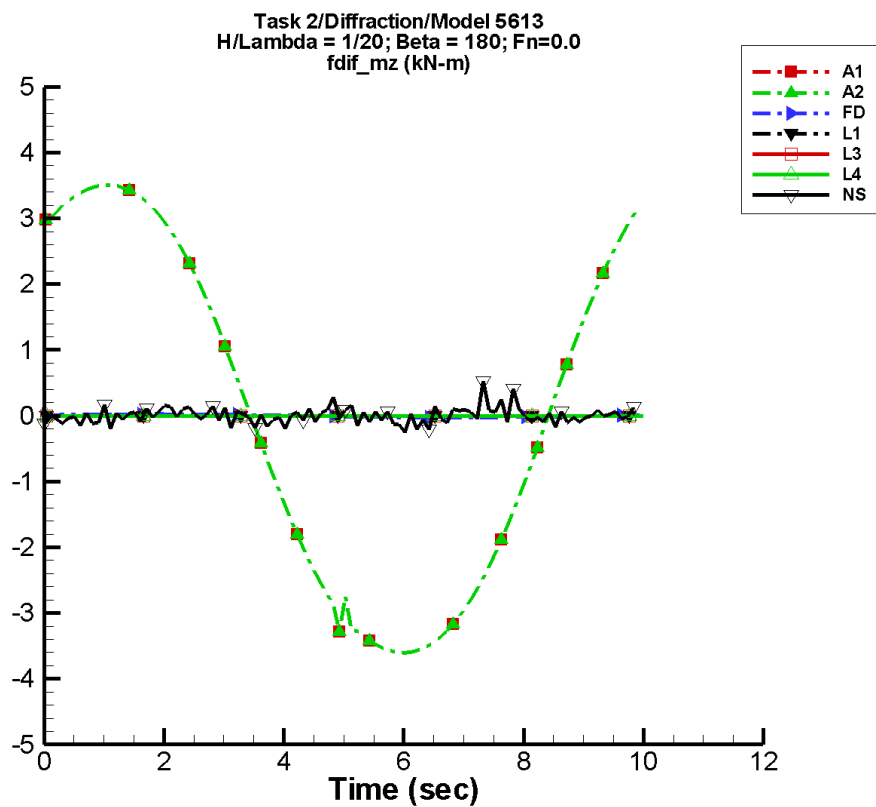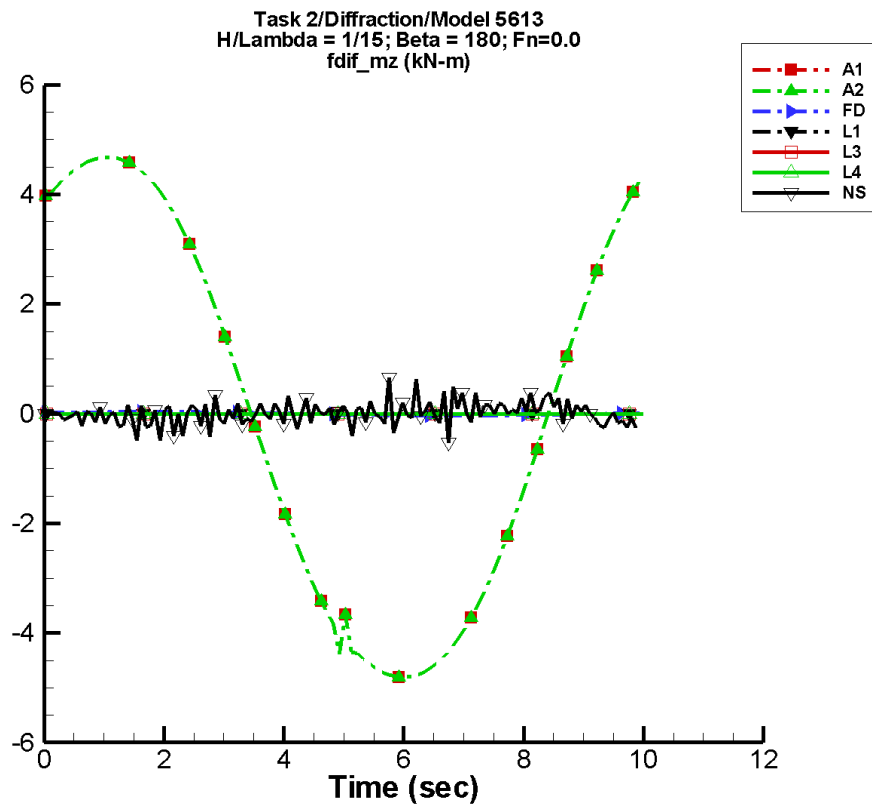
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	7.38	4.64E+04	-36	14.1	143
A2	7.38	4.64E+04	-36	14.1	143
FD	10.4	4.76E+04	-13	16.9	149
L1	-31.7	4.18E+04	-32	1.64E+03	-83
L3	-30.8	4.17E+04	-33	1.64E+03	-83
L4	6.48E+03	4.23E+04	-28	3.06E+03	151
NF	—	—	—	—	—
NS	-5.17E+03	4.17E+04	16	4.00E+03	-180

Table G–1970. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-4.80E+04	4.71E+04	-4.57E+04	4.60E+04
A2	-4.80E+04	4.71E+04	-4.57E+04	4.60E+04
FD	-4.76E+04	4.76E+04	-4.75E+04	4.75E+04
L1	-4.14E+04	4.24E+04	-4.14E+04	4.23E+04
L3	-4.14E+04	4.23E+04	-4.13E+04	4.22E+04
L4	-3.84E+04	6.64E+04	-3.57E+04	5.17E+04
NF	—	—	—	—
NS	-4.97E+04	3.44E+04	-4.91E+04	3.41E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–986. Time history of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
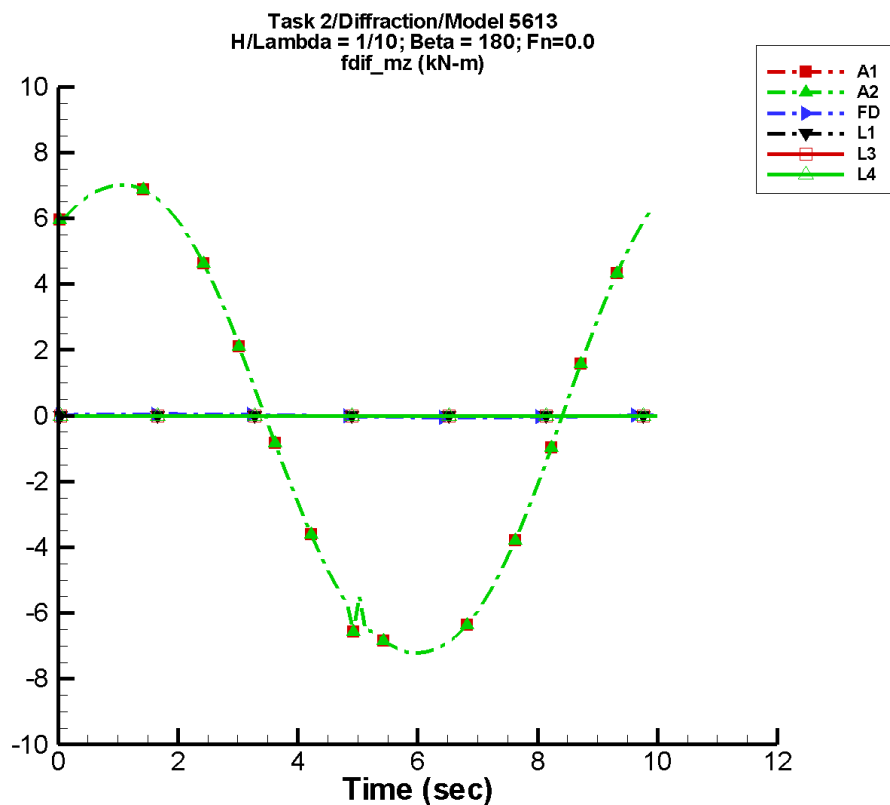
Table G–1971. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	22.2	1.40E+05	-36	42.5	143
A2	22.2	1.40E+05	-36	42.5	143
FD	31.1	1.43E+05	-13	50.7	149
L1	-284.	1.25E+05	-32	1.48E+04	-83
L3	-281.	1.25E+05	-33	1.48E+04	-83
L4	5.59E+04	1.37E+05	-22	1.95E+04	162
NF	—	—	—	—	—
NS	-5.27E+04	1.43E+05	11	3.37E+04	-146

Table G–1972. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.44E+05	1.42E+05	-1.37E+05	1.38E+05
A2	-1.44E+05	1.42E+05	-1.37E+05	1.38E+05
FD	-1.43E+05	1.43E+05	-1.42E+05	1.42E+05
L1	-1.24E+05	1.32E+05	-1.24E+05	1.32E+05
L3	-1.24E+05	1.32E+05	-1.24E+05	1.32E+05
L4	-6.99E+04	3.09E+05	-6.64E+04	2.34E+05
NF	—	—	—	—
NS	-2.24E+05	9.33E+04	-2.14E+05	9.36E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–987. Time history of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
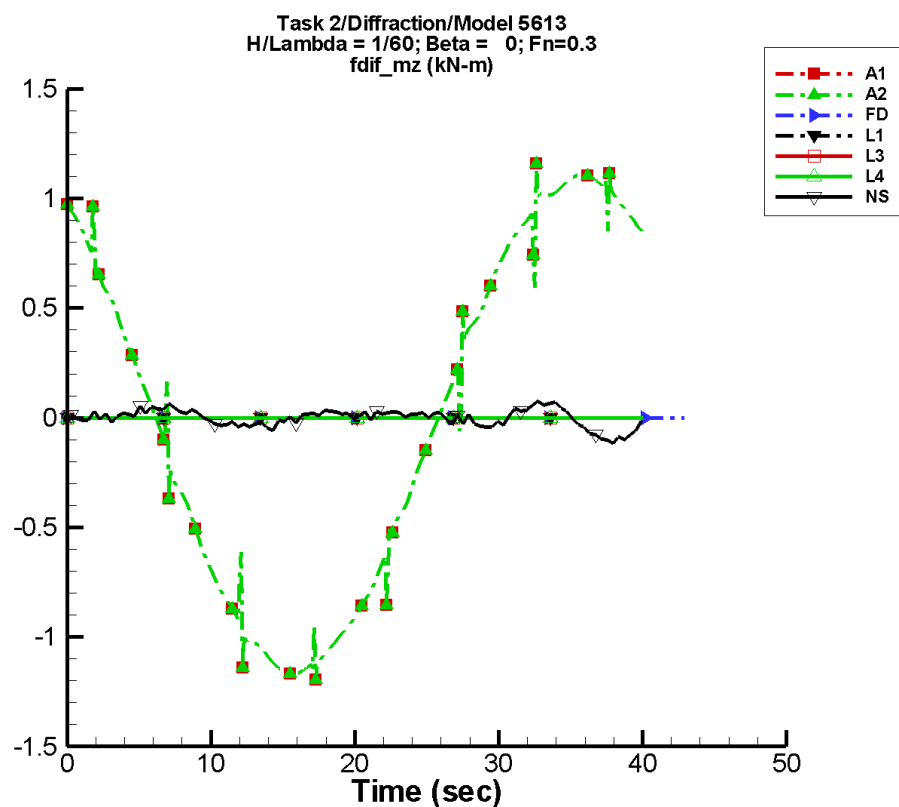
Table G–1973. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	29.6	1.86E+05	-36	56.7	143
A2	29.6	1.86E+05	-36	56.7	143
FD	41.5	1.90E+05	-13	67.6	149
L1	-507.	1.67E+05	-32	2.63E+04	-83
L3	-503.	1.67E+05	-33	2.63E+04	-83
L4	9.34E+04	1.99E+05	-20	2.55E+04	159
NF	—	—	—	—	—
NS	-9.38E+04	2.18E+05	12	6.31E+04	-139

Table G–1974. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
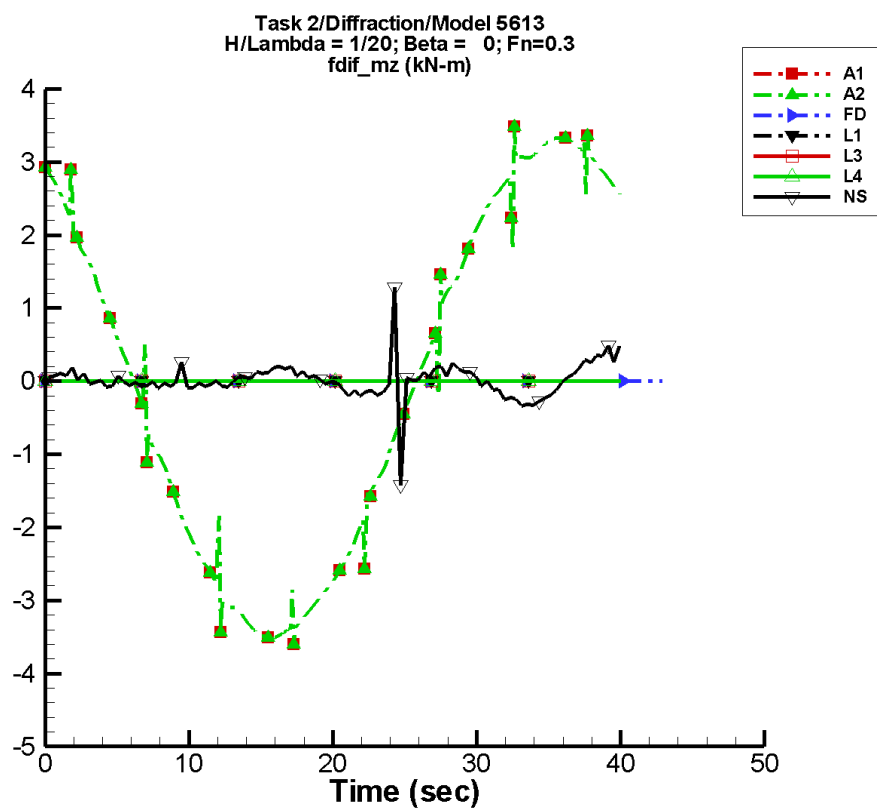
Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-1.93E+05	1.89E+05	-1.83E+05	1.85E+05
A2	-1.93E+05	1.89E+05	-1.83E+05	1.85E+05
FD	-1.90E+05	1.90E+05	-1.90E+05	1.90E+05
L1	-1.67E+05	1.81E+05	-1.67E+05	1.80E+05
L3	-1.68E+05	1.80E+05	-1.67E+05	1.80E+05
L4	-1.71E+05	4.53E+05	-8.47E+04	3.52E+05
NF	—	—	—	—
NS	-3.64E+05	1.47E+05	-3.48E+05	1.31E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–988. Time history of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
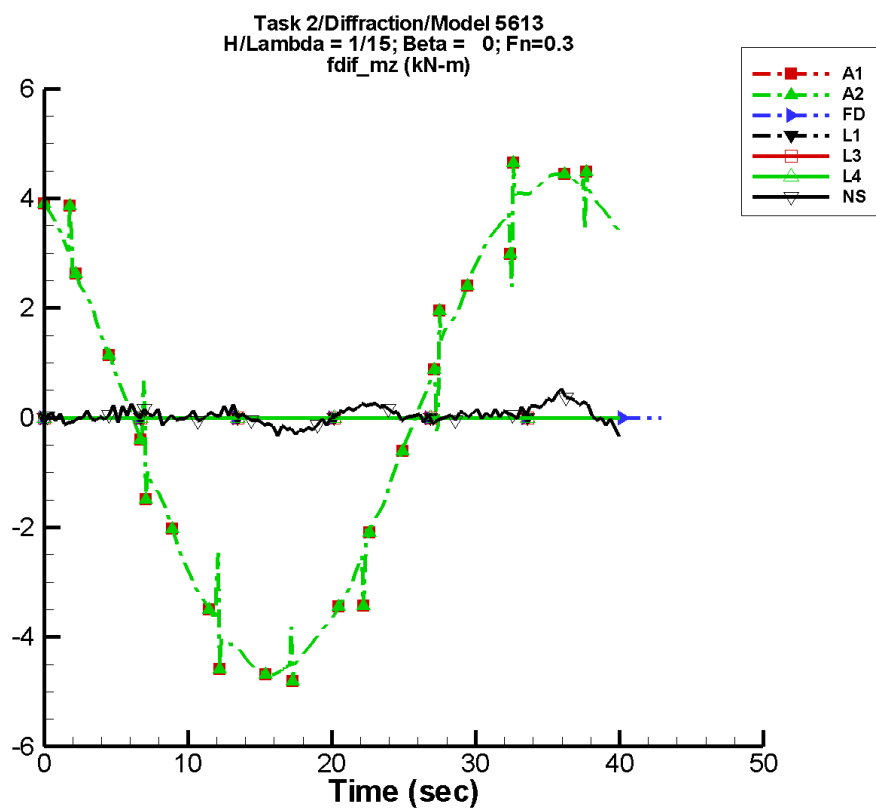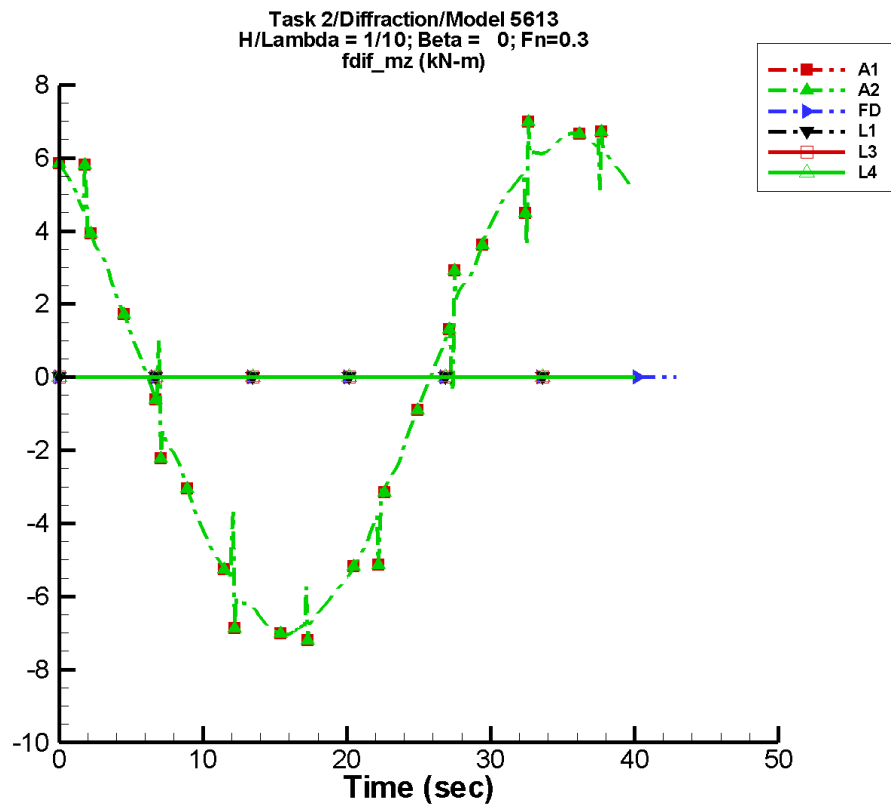
Table G–1975. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	44.4	2.79E+05	-36	85.1	143
A2	44.4	2.79E+05	-36	85.1	143
FD	62.2	2.86E+05	-13	101.	149
L1	-1.14E+03	2.51E+05	-32	5.92E+04	-83
L3	-1.14E+03	2.50E+05	-33	5.92E+04	-83
L4	1.70E+05	3.54E+05	-21	1.30E+04	168
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1976. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 45°$, $F_n = 0.3$, and period = 21.23 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.89E+05	2.84E+05	-2.75E+05	2.77E+05
A2	-2.89E+05	2.84E+05	-2.75E+05	2.77E+05
FD	-2.86E+05	2.86E+05	-2.85E+05	2.85E+05
L1	-2.59E+05	2.85E+05	-2.59E+05	2.85E+05
L3	-2.60E+05	2.84E+05	-2.60E+05	2.84E+05
L4	-6.51E+05	6.56E+05	-2.04E+05	5.73E+05
NF	—	—	—	—
NS	—	—	—	—

Task 2/Diffraction/Model 5613
H/Lambda = 1/60; Beta = 90; Fn=0.3
fdif_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–989. Time history of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
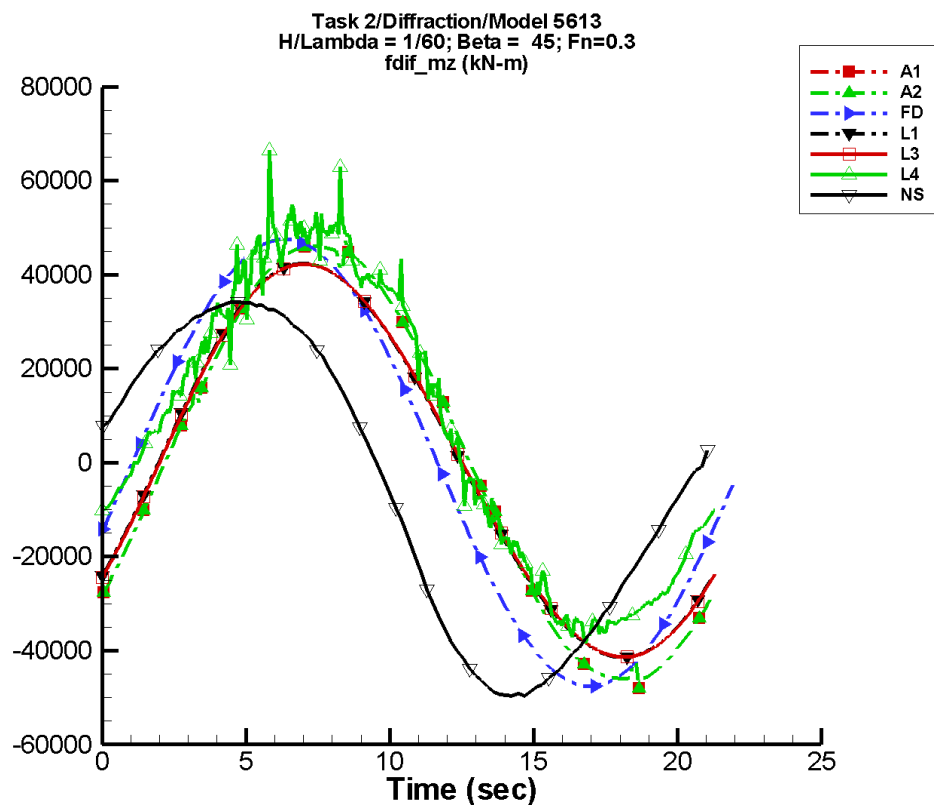
Table G–1977. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-61.3	6.35E+04	2	72.8	3
A2	-61.3	6.35E+04	2	72.8	3
FD	-0.922	9.99E+04	33	41.4	65
L1	1.61E+03	4.54E+04	12	3.06E+03	-83
L3	1.61E+03	4.54E+04	11	3.06E+03	-83
L4	8.72E+03	4.19E+04	23	1.06E+04	-66
NF	—	—	—	—	—
NS	-1.23E+04	4.98E+04	141	1.17E+04	36

Table G–1978. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-6.32E+04	6.33E+04	-6.26E+04	6.27E+04
A2	-6.32E+04	6.33E+04	-6.26E+04	6.27E+04
FD	-9.99E+04	9.99E+04	-9.89E+04	9.89E+04
L1	-4.09E+04	5.00E+04	-4.08E+04	4.98E+04
L3	-4.08E+04	5.00E+04	-4.07E+04	4.98E+04
L4	-3.59E+04	6.19E+04	-3.02E+04	6.09E+04
NF	—	—	—	—
NS	-7.20E+04	2.85E+04	-6.82E+04	2.79E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–990. Time history of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1979. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
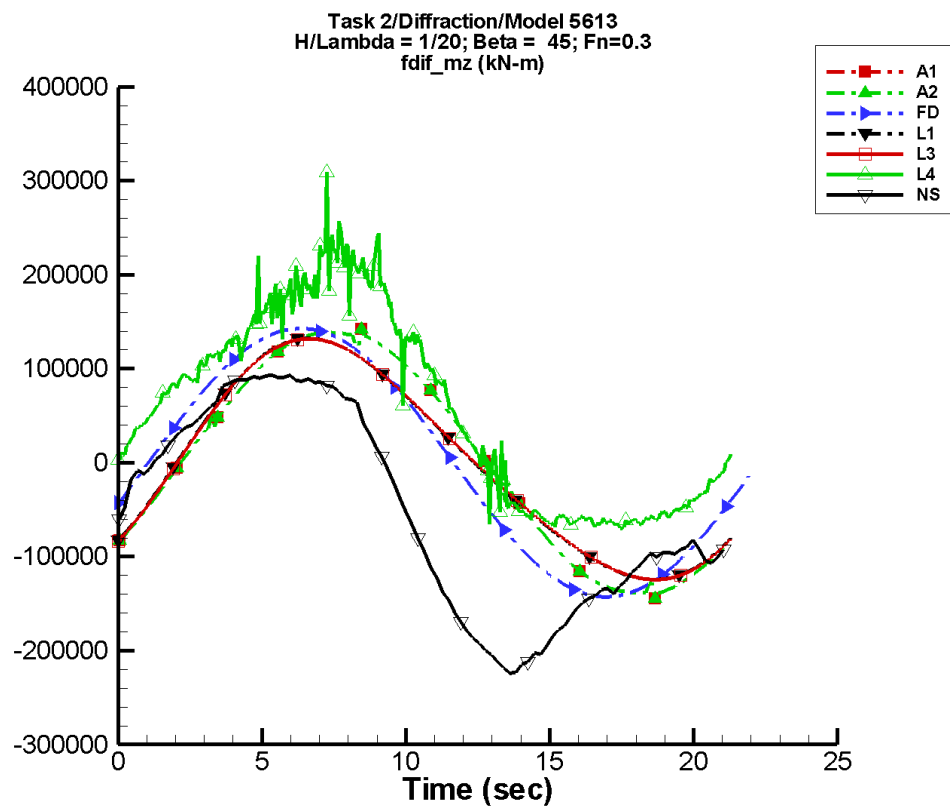
Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-184.	1.91E+05	2	219.	3
A2	-184.	1.91E+05	2	219.	3
FD	-2.75	3.00E+05	33	124.	65
L1	1.46E+04	1.36E+05	12	2.74E+04	-83
L3	1.47E+04	1.36E+05	11	2.74E+04	-83
L4	7.19E+04	1.29E+05	14	8.02E+04	-59
NF	—	—	—	—	—
NS	-1.04E+05	2.20E+05	146	1.10E+05	26

Table G–1980. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.90E+05	1.90E+05	-1.88E+05	1.89E+05
A2	-1.90E+05	1.90E+05	-1.88E+05	1.89E+05
FD	-3.00E+05	3.00E+05	-2.97E+05	2.97E+05
L1	-9.84E+04	1.78E+05	-9.81E+04	1.77E+05
L3	-9.74E+04	1.78E+05	-9.72E+04	1.77E+05
L4	-1.15E+05	2.82E+05	-8.65E+04	2.74E+05
NF	—	—	—	—
NS	-5.12E+05	9.27E+04	-4.46E+05	5.27E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–991. Time history of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
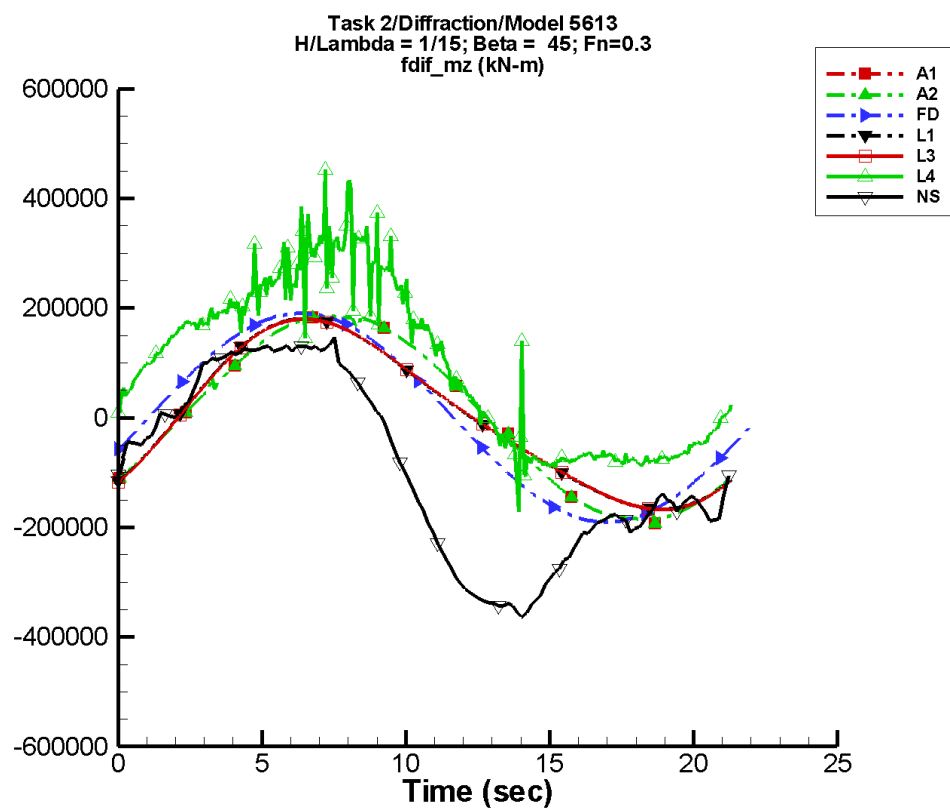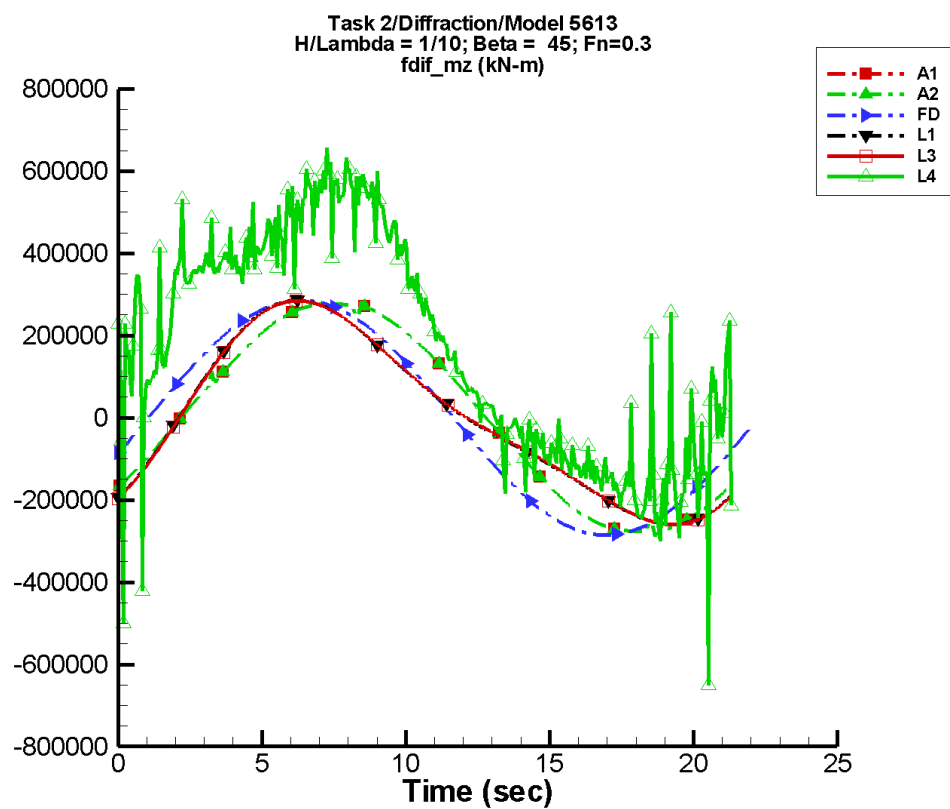
Table G–1981. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-246.	2.55E+05	2	292.	3
A2	-246.	2.55E+05	2	292.	3
FD	-3.69	4.00E+05	33	166.	65
L1	2.61E+04	1.82E+05	12	4.86E+04	-83
L3	2.61E+04	1.82E+05	11	4.86E+04	-83
L4	1.17E+05	1.91E+05	8	1.26E+05	-62
NF	—	—	—	—	—
NS	-1.56E+05	3.19E+05	138	2.01E+05	17

Table G–1982. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.54E+05	2.54E+05	-2.51E+05	2.52E+05
A2	-2.54E+05	2.54E+05	-2.51E+05	2.52E+05
FD	-4.00E+05	4.00E+05	-3.95E+05	3.95E+05
L1	-1.20E+05	2.55E+05	-1.20E+05	2.54E+05
L3	-1.18E+05	2.55E+05	-1.18E+05	2.54E+05
L4	-1.64E+05	4.27E+05	-1.30E+05	4.15E+05
NF	—	—	—	—
NS	-7.42E+05	1.54E+05	-7.16E+05	1.04E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–992. Time history of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
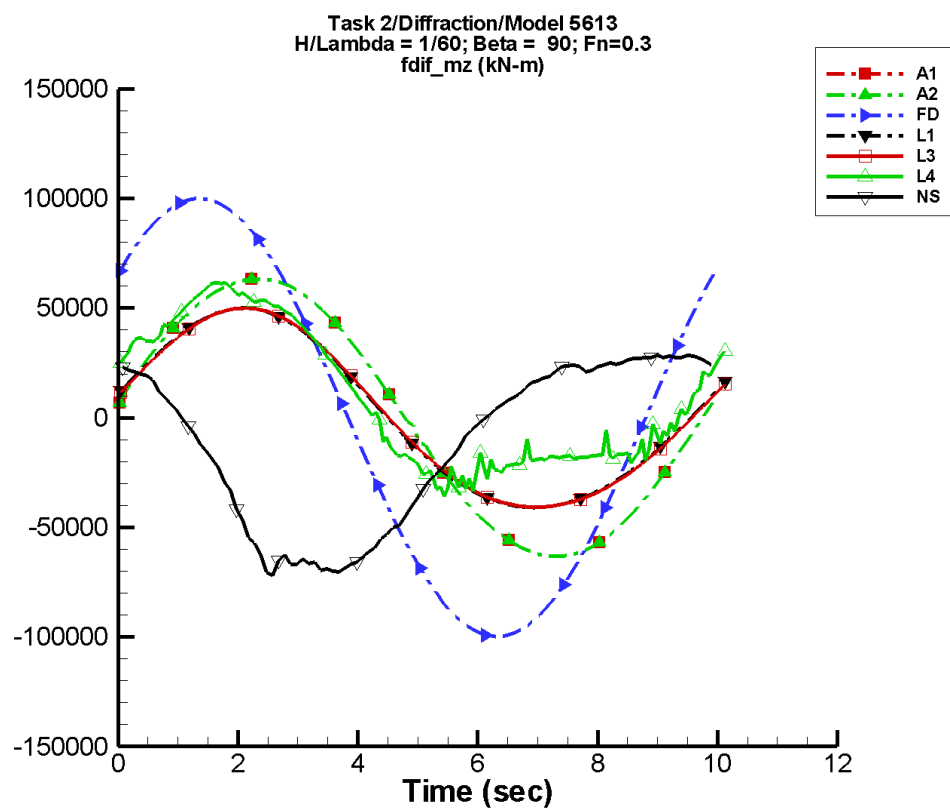
Table G–1983. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-369.	3.82E+05	2	438.	3
A2	-369.	3.82E+05	2	438.	3
FD	-5.51	5.99E+05	33	249.	65
L1	5.87E+04	2.72E+05	12	1.09E+05	-83
L3	5.87E+04	2.72E+05	11	1.09E+05	-83
L4	2.15E+05	3.78E+05	1	2.41E+05	-84
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1984. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 90°$, $F_n = 0.3$, and period = 9.93 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-3.81E+05	3.81E+05	-3.77E+05	3.78E+05
A2	-3.81E+05	3.81E+05	-3.77E+05	3.78E+05
FD	-5.99E+05	5.99E+05	-5.93E+05	5.93E+05
L1	-1.66E+05	4.39E+05	-1.65E+05	4.36E+05
L3	-1.62E+05	4.39E+05	-1.60E+05	4.36E+05
L4	-2.93E+05	1.17E+06	-2.70E+05	8.21E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from NFA.

Figure G–993. Time history of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
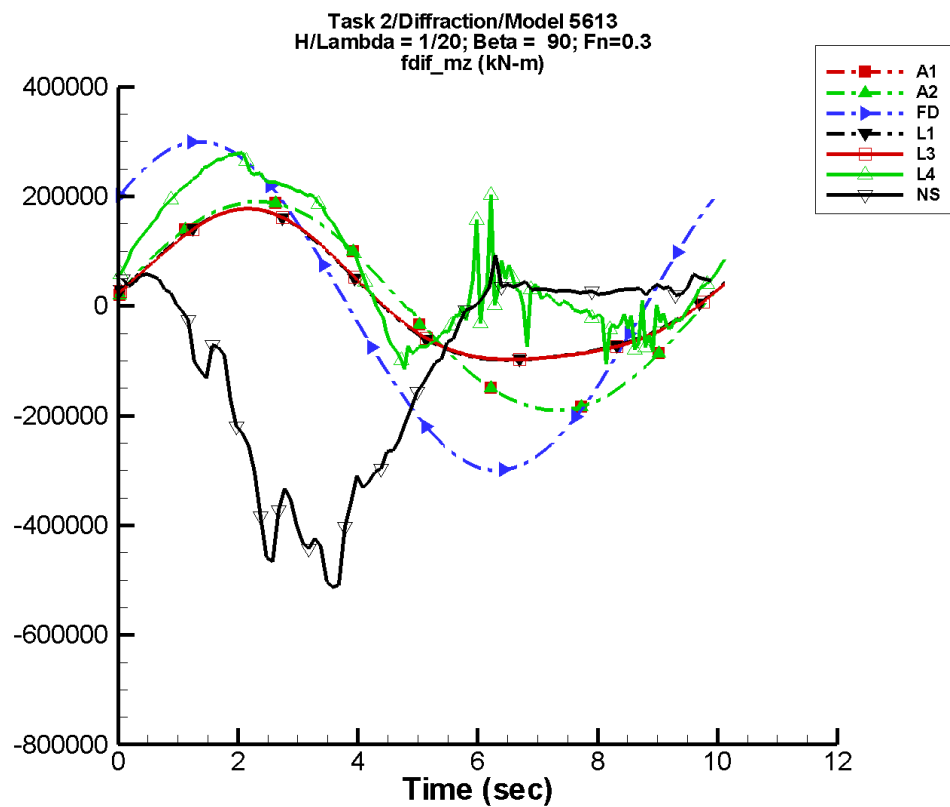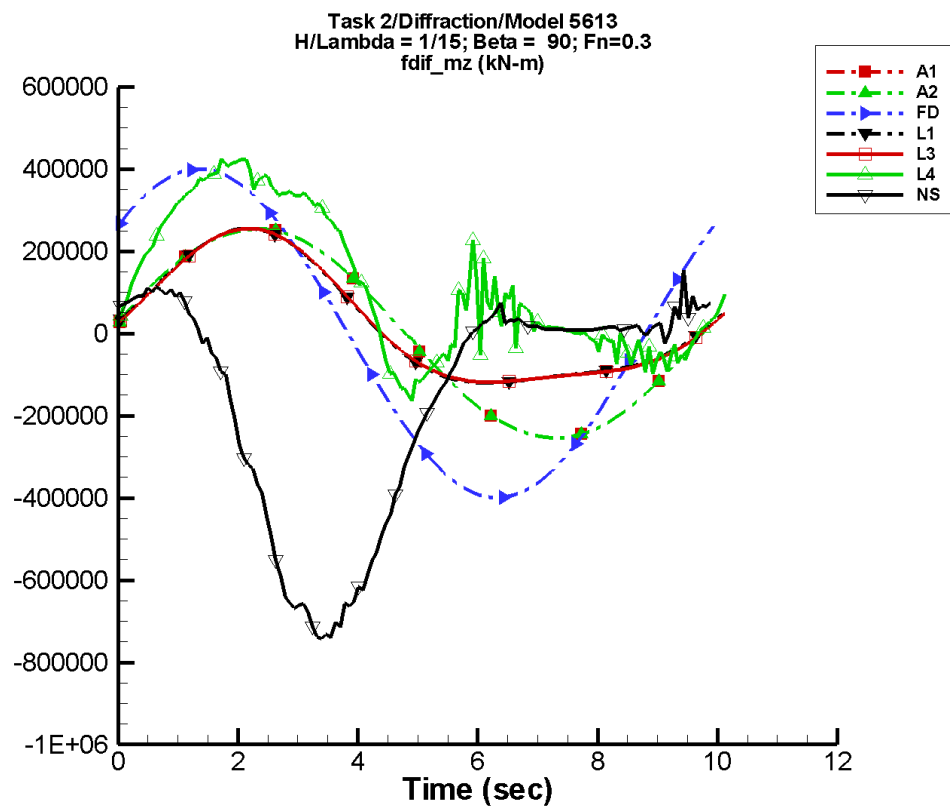
Table G–1985. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	57.6	6.01E+04	162	559.	103
A2	57.6	6.01E+04	162	559.	103
FD	6.13E-02	1.17E+05	145	3.59	-71
L1	1.65E+03	5.87E+04	165	4.74E+03	99
L3	1.65E+03	5.83E+04	163	4.74E+03	99
L4	7.61E+03	6.26E+04	165	4.74E+03	101
NF	—	—	—	—	—
NS	-9.83E+03	6.38E+04	-173	6.72E+03	-81

Table G–1986. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-6.06E+04	5.98E+04	-5.91E+04	5.83E+04
A2	-6.06E+04	5.98E+04	-5.91E+04	5.83E+04
FD	-1.17E+05	1.17E+05	-1.15E+05	1.15E+05
L1	-6.09E+04	5.70E+04	-6.03E+04	5.67E+04
L3	-6.04E+04	5.70E+04	-5.99E+04	5.66E+04
L4	-6.60E+04	7.25E+04	-5.70E+04	6.37E+04
NF	—	—	—	—
NS	-6.89E+04	6.09E+04	-6.80E+04	5.91E+04

Data identically zero, insufficient, or not available from NFA.

Figure G–994. Time history of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
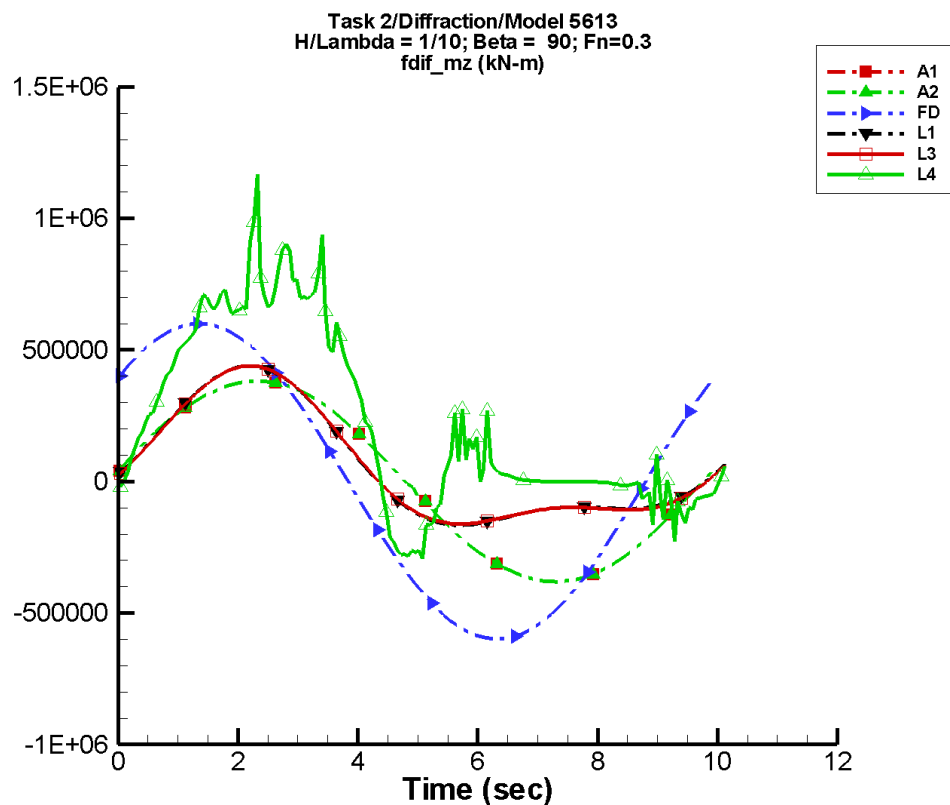
Table G–1987. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	173.	1.81E+05	162	1.68E+03	103
A2	173.	1.81E+05	162	1.68E+03	103
FD	0.165	3.52E+05	145	10.8	-71
L1	1.48E+04	1.76E+05	165	4.26E+04	99
L3	1.48E+04	1.75E+05	163	4.26E+04	99
L4	6.16E+04	1.92E+05	159	3.42E+04	107
NF	—	—	—	—	—
NS	-7.86E+04	1.71E+05	-177	3.60E+04	-75

Table G–1988. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-1.82E+05	1.80E+05	-1.78E+05	1.75E+05
A2	-1.82E+05	1.80E+05	-1.78E+05	1.75E+05
FD	-3.52E+05	3.52E+05	-3.44E+05	3.44E+05
L1	-1.99E+05	1.74E+05	-1.96E+05	1.73E+05
L3	-1.97E+05	1.76E+05	-1.94E+05	1.74E+05
L4	-1.64E+05	4.02E+05	-1.47E+05	2.65E+05
NF	—	—	—	—
NS	-2.63E+05	1.75E+05	-2.39E+05	1.44E+05

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 135; Fn=0.3
fdif_mz (kN-m)

Data identically zero, insufficient, or not available from NFA.

Figure G–995. Time history of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
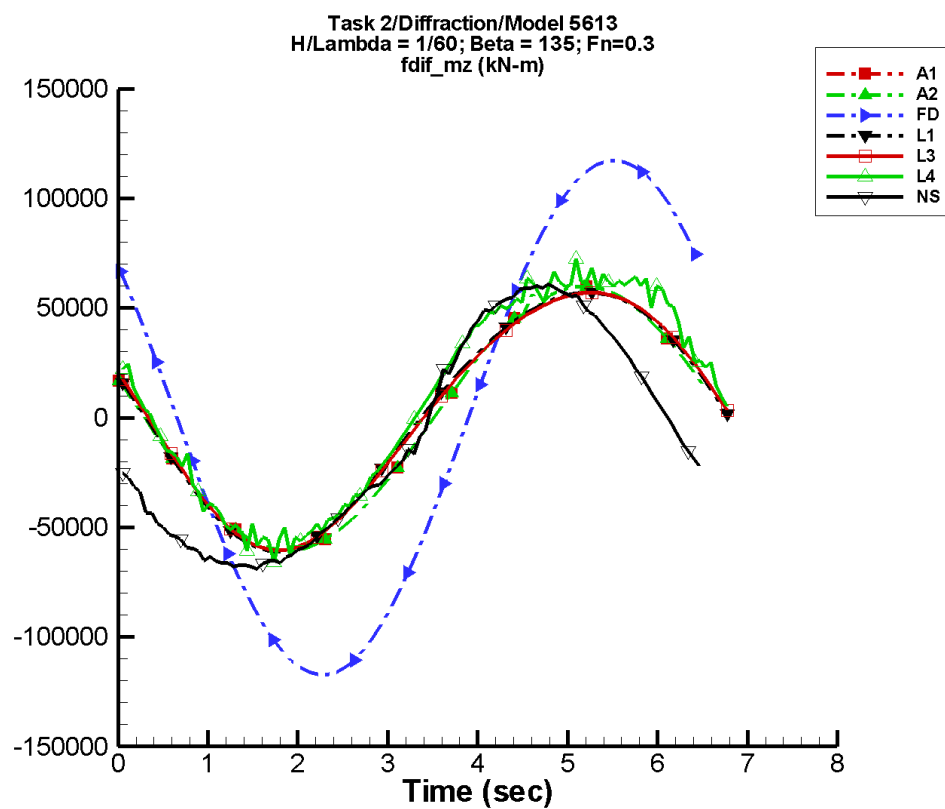
Table G–1989. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	231.	2.41E+05	162	2.25E+03	103
A2	231.	2.41E+05	162	2.25E+03	103
FD	0.203	4.70E+05	145	14.3	-71
L1	2.64E+04	2.35E+05	165	7.58E+04	99
L3	2.64E+04	2.33E+05	163	7.58E+04	99
L4	9.94E+04	2.66E+05	154	5.70E+04	107
NF	—	—	—	—	—
NS	-1.21E+05	2.42E+05	-163	4.11E+04	-91

Table G–1990. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
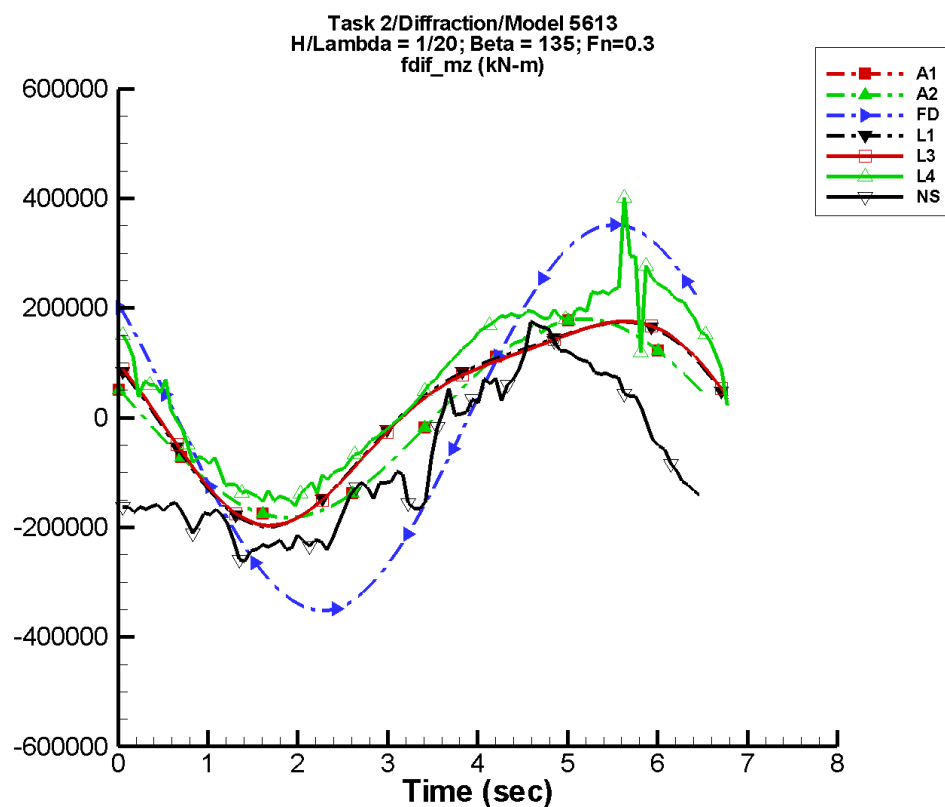
Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-2.43E+05	2.40E+05	-2.37E+05	2.34E+05
A2	-2.43E+05	2.40E+05	-2.37E+05	2.34E+05
FD	-4.69E+05	4.69E+05	-4.58E+05	4.58E+05
L1	-2.76E+05	2.44E+05	-2.72E+05	2.41E+05
L3	-2.74E+05	2.47E+05	-2.69E+05	2.44E+05
L4	-2.09E+05	7.84E+05	-1.83E+05	3.88E+05
NF	—	—	—	—
NS	-4.13E+05	1.60E+05	-3.43E+05	1.52E+05

Data identically zero, insufficient, or not available from NFA and NSHIPMO.

Figure G–996. Time history of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
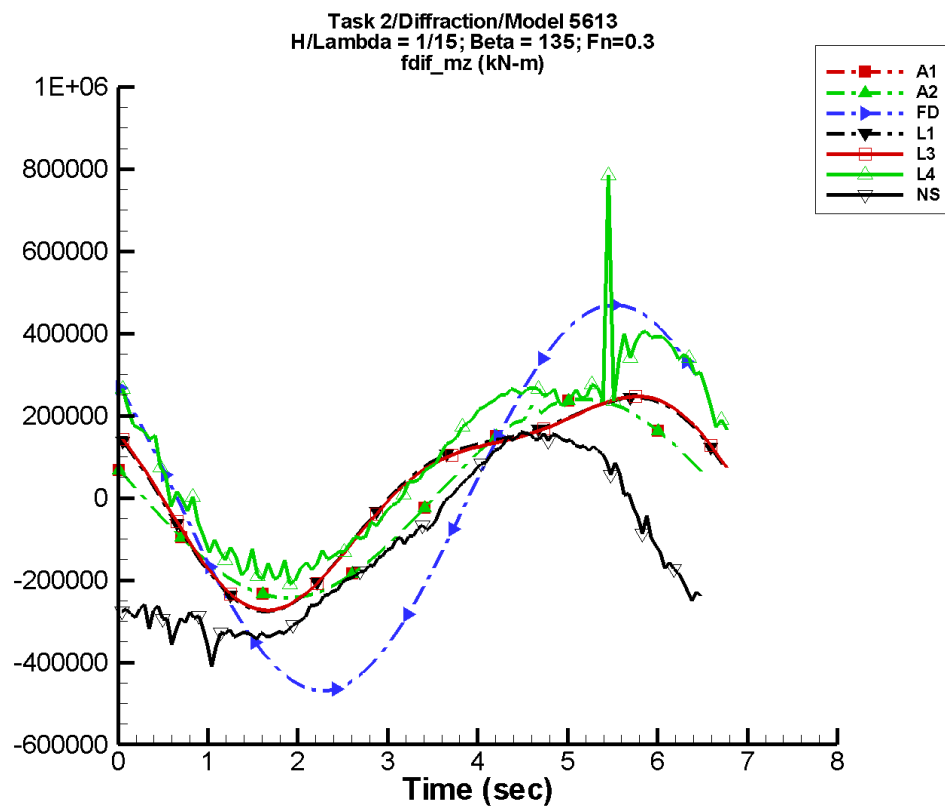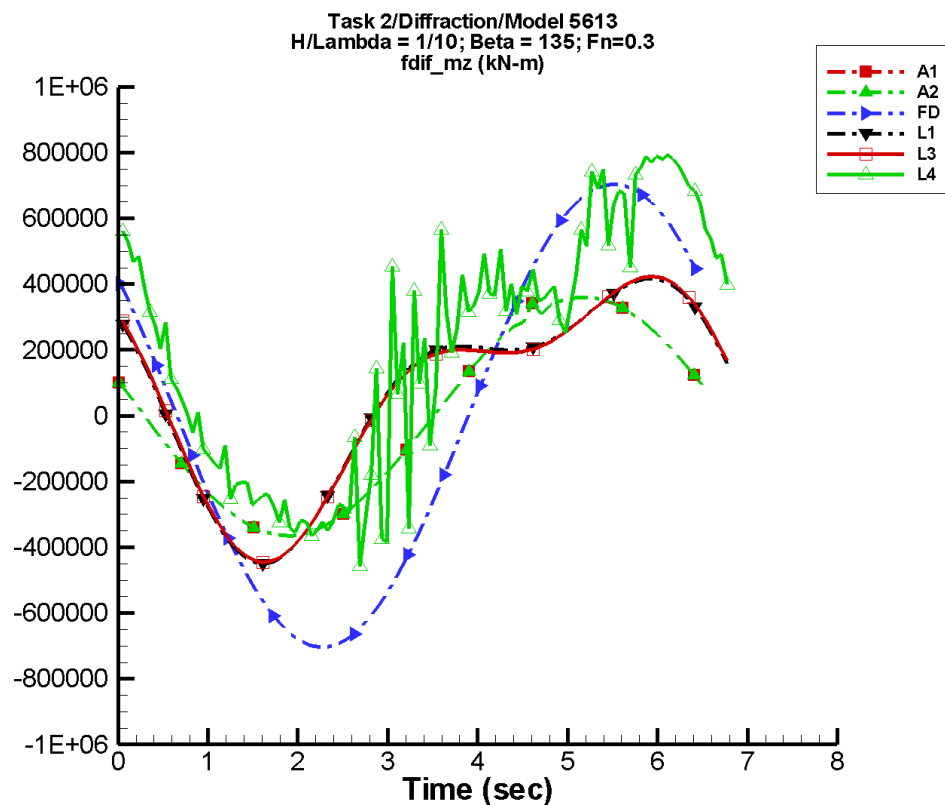
Table G–1991. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	347.	3.62E+05	162	3.37E+03	103
A2	347.	3.62E+05	162	3.37E+03	103
FD	0.340	7.04E+05	145	21.5	-71
L1	5.93E+04	3.52E+05	165	1.71E+05	99
L3	5.93E+04	3.50E+05	163	1.71E+05	99
L4	1.98E+05	4.75E+05	147	1.27E+05	92
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–1992. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 135°$, $F_n = 0.3$, and period = 6.48 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-3.65E+05	3.60E+05	-3.56E+05	3.51E+05
A2	-3.65E+05	3.60E+05	-3.56E+05	3.51E+05
FD	-7.04E+05	7.04E+05	-6.87E+05	6.88E+05
L1	-4.49E+05	4.17E+05	-4.41E+05	4.11E+05
L3	-4.45E+05	4.23E+05	-4.36E+05	4.17E+05
L4	-4.57E+05	7.93E+05	-3.34E+05	7.72E+05
NF	—	—	—	—
NS	—	—	—	—

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–997. Time history of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
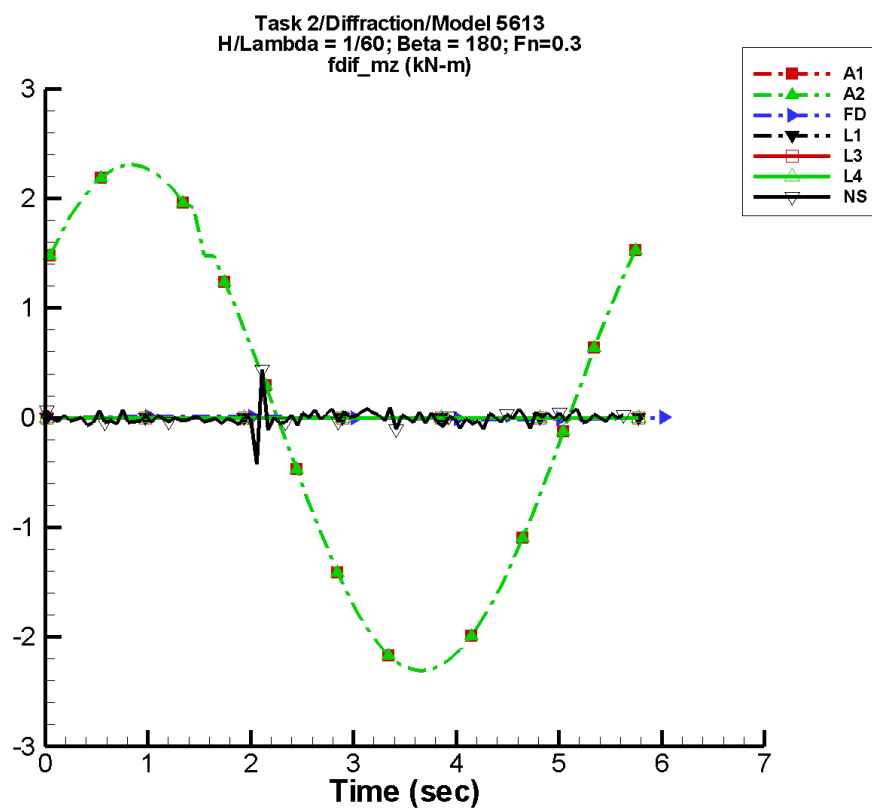
Table G–1993. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-1.14E-03	2.32	29	8.49E-03	-55
A2	-1.14E-03	2.32	29	8.49E-03	-55
FD	1.40E-06	1.39E-02	-53	2.41E-05	-99
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-3.44E-03	4.06E-03	180	1.79E-02	89

Table G–1994. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/60$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-2.31	2.61	-2.24	2.26
A2	-2.31	2.61	-2.24	2.26
FD	-1.39E-02	1.39E-02	-1.35E-02	1.35E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.423	0.439	-3.93E-02	3.35E-02

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–998. Time history of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1995. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-3.42E-03	6.96	29	2.55E-02	-55
A2	-3.42E-03	6.96	29	2.55E-02	-55
FD	4.20E-06	4.18E-02	-53	7.21E-05	-99
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	-8.25E-03	2.87E-02	-90	1.06E-02	152

Table G–1996. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/20$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

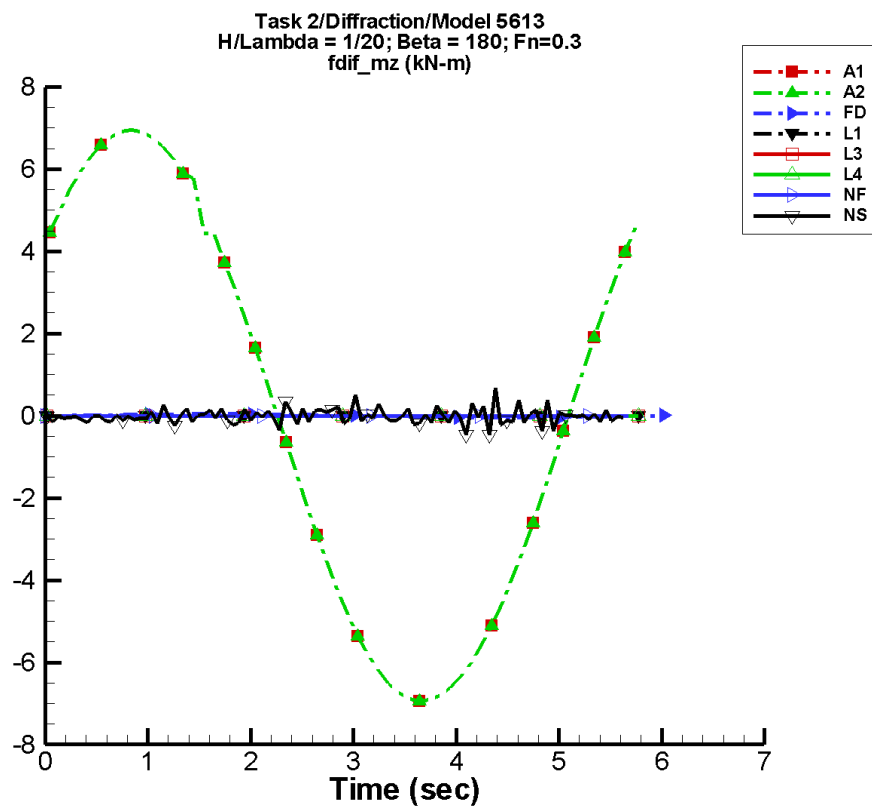| Code | Unfiltered | | Filtered | |
	Minimum (kN-m)	Maximum (kN-m)	Minimum (kN-m)	Maximum (kN-m)
A1	-6.94	7.86	-6.73	6.81
A2	-6.94	7.86	-6.73	6.81
FD	-4.18E-02	4.17E-02	-4.05E-02	4.04E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-0.473	0.675	-7.28E-02	9.90E-02

Task 2/Diffraction/Model 5613
H/Lambda = 1/15; Beta = 180; Fn=0.3
fdif_mz (kN-m)

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4 and NFA.

Figure G–999. Time history of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.
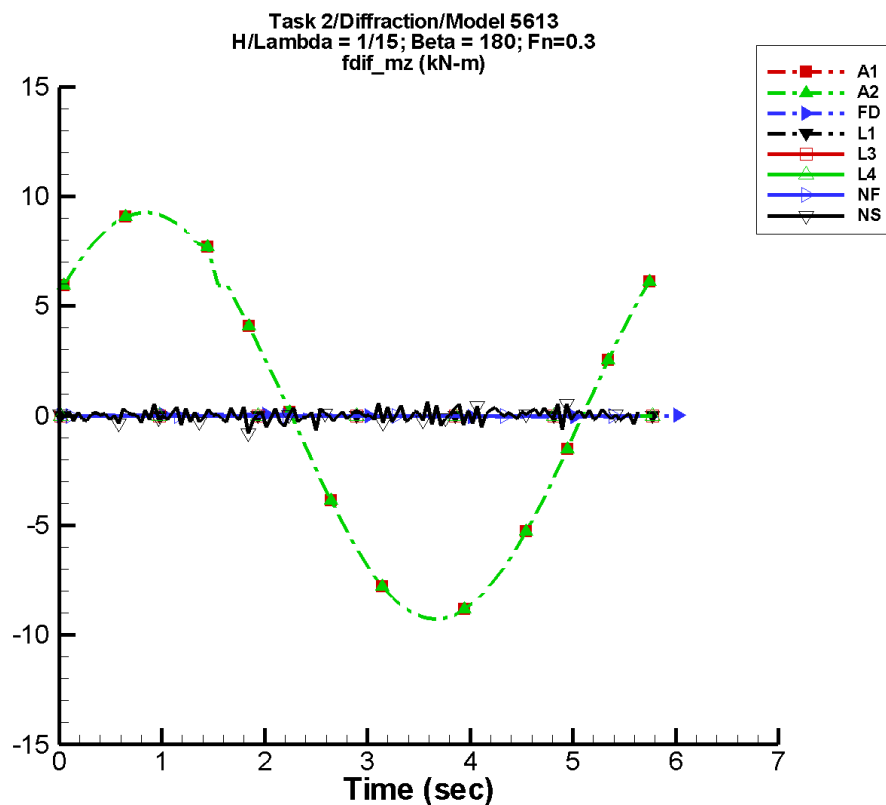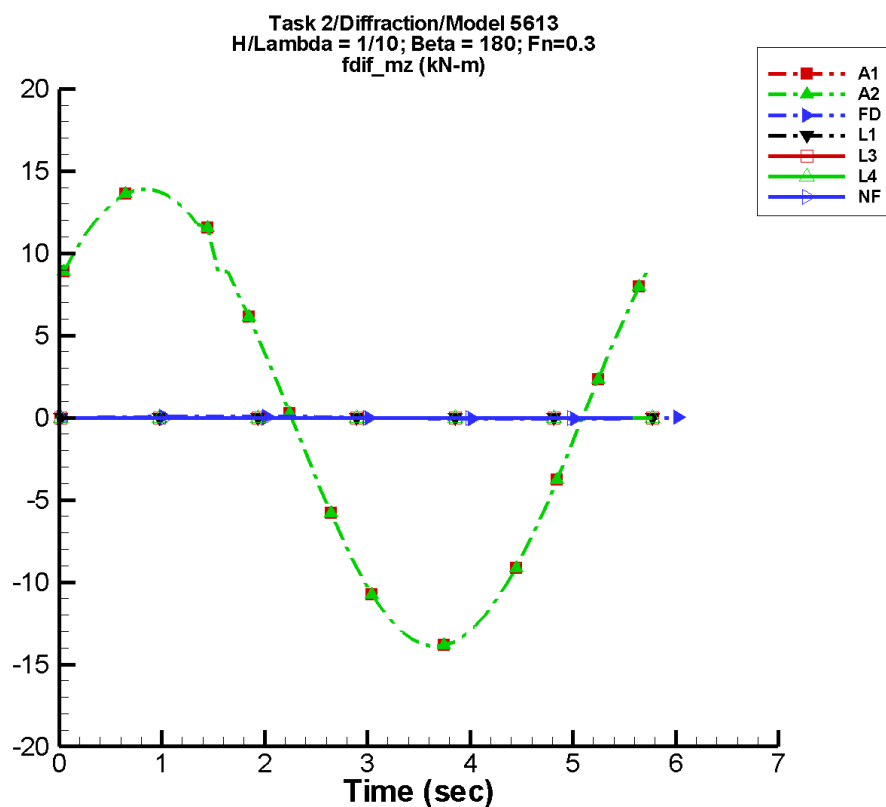
Table G–1997. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-4.57E-03	9.30	29	3.41E-02	-55
A2	-4.57E-03	9.30	29	3.41E-02	-55
FD	5.61E-06	5.58E-02	-53	9.62E-05	-99
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	3.89E-03	6.97E-02	176	1.59E-02	-48

Table G–1998. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/15$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.66 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Unfiltered Maximum (kN-m)	Filtered Minimum (kN-m)	Filtered Maximum (kN-m)
A1	-9.27	10.5	-8.99	9.09
A2	-9.27	10.5	-8.99	9.09
FD	-5.57E-02	5.57E-02	-5.39E-02	5.39E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	-1.32	0.631	-0.134	0.127

Data identically zero, insufficient, or not available from LAMP-1, LAMP-3, LAMP-4, NFA and NSHIPMO.

Figure G–1000. Time history of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Table G–1999. Coefficients of the Fourier fit $a_0 + a_1 \sin(\omega t + \Phi_1) + a_2 \sin(2\omega t + \Phi_2) + \cdots$ of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	a_0 (kN-m)	a_1 (kN-m)	Φ_1 (deg)	a_2 (kN-m)	Φ_2 (deg)
A1	-6.85E-03	13.9	29	5.11E-02	-55
A2	-6.85E-03	13.9	29	5.11E-02	-55
FD	8.41E-06	8.37E-02	-53	1.44E-04	-99
L1	—	—	—	—	—
L3	—	—	—	—	—
L4	—	—	—	—	—
NF	—	—	—	—	—
NS	—	—	—	—	—

Table G–2000. Minimum and maximum of of M_z^{dif} for one period for $H/\lambda = 1/10$, $\lambda/L = 1$, $\beta = 180°$, $F_n = 0.3$, and period = 5.65 sec in the case 0-DOF motion in waves of Model 5613 scaled to L = 154 m.

Code	Unfiltered Minimum (kN-m)	Maximum (kN-m)	Filtered Minimum (kN-m)	Maximum (kN-m)
A1	-13.9	15.7	-13.5	13.6
A2	-13.9	15.7	-13.5	13.6
FD	-8.36E-02	8.35E-02	-8.09E-02	8.08E-02
L1	—	—	—	—
L3	—	—	—	—
L4	—	—	—	—
NF	—	—	—	—
NS	—	—	—	—